Subsidiary Legislation made under s. 18.

ENVIRONMENT (RENEWABLE ENERGY SOURCES) REGULATIONS 2011

(LN. 2011/143)

Commencement **22.9.2011**

EU Legislation/International Agreements involved:
Directive 2001/77/EC
Directive 2003/30/EC
Directive 2009/28/EC

ARRANGEMENT OF REGULATIONS

Regulation

SCHEDULE 1
OVERALL TARGETS FOR THE SHARE OF ENERGY FROM RENEWABLE SOURCES IN GROSS FINAL CONSUMPTION OF ENERGY IN 2020

SCHEDULE 2
METHOD FOR THE CALCULATION OF ENERGY FROM RENEWABLE SOURCES

SCHEDULE 3
CERTIFICATION OF INSTALLERS

SCHEDULE 4
RULES FOR CALCULATING THE GREENHOUSE GAS IMPACT OF BIOFUELS, BIOLIQUIDS AND THEIR FOSSIL FUEL COMPARATORS

ENVIRONMENT (RENEWABLE ENERGY SOURCES) REGULATIONS 2011

Subsidiary 2011/143

In exercise of the powers conferred on it by section 18 of the Environment Act 2005 and for the purpose of transposing into the law of Gibraltar Council Directive 2009/28/EC of the European Parliament and 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, the Government has made the following Regulations–

Title and commencement.

1. These Regulations may be cited as the Environment (Renewable Energy Sources) Regulations 2011 and come into operation on the day of publication.

Interpretation.

2.(1) In these Regulations, unless the context otherwise requires–

"actual value" means the greenhouse gas emission saving for some or all of the steps of a specified biofuels production process calculated in accordance with the methodology set out in part C of Annex V of the Directive ;

"aerothermal energy" means energy stored in the form of heat in the ambient air;

"biofuels" means liquid or gaseous fuel for transport produced from biomass;

"bioliquids" means liquid fuel for energy purposes other than for transport, including electricity and heating and cooling, produced from biomass;

"biomass" means the biodegradable fraction of products, waste and residues of biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste;

"Commission" means the European Commission;

"competent authority" means the Minister with responsibility for the environment;

"default value" means a value derived from a typical value by the application of pre-determined factors and that may, in circumstances specified in the Directive, be used in place of an actual value;

"Directive" means 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, as amended from time to time;

"district heating" or "district cooling" means the distribution of thermal energy in the form of steam, hot water or chilled liquids, from a central source of production through a network to multiple buildings or sites, for the use of space or process heating or cooling;

"energy from renewable sources" means energy from renewable non-fossil sources, that is, wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases;

"geothermal energy" means energy stored in the form of heat beneath the surface of solid earth;

"gross final consumption of energy" means the energy commodities delivered for energy purposes to industry, transport, households, services including public services, agriculture, forestry and fisheries, including the consumption of electricity and heat by the energy branch for electricity and heat production and including losses of electricity and heat in distribution and transmission;

"guarantee of origin" means an electronic document which has the sole function of providing proof to a final customer that a given share or quantity of energy was produced from renewable sources;

"hydrothermal energy" means energy stored in the form of heat in surface water;

"Member State" means a Member State of the European Economic Area;

"Plan" means the renewable energy action plan for Gibraltar referred to in regulation 4;

"the register" means the electronic register established by the competent authority under regulation 16;

"renewable energy obligation" means a support scheme requiring energy producers to include a given proportion of energy from renewable sources in their production, requiring energy suppliers to include a given proportion of energy from renewable sources in their supply, or requiring energy consumers to include a given proportion of energy from renewable sources in their consumption, and this includes schemes under which such requirements may be fulfilled by using green certificates;

"support scheme" means any instrument, scheme or mechanism, applied by the Government or by the Government with one or more Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased, and this includes, but is not restricted to, investment aid, tax exemptions or reductions, tax refunds, renewable energy obligation support schemes including those using green certificates, and direct price support schemes including feed-in tariffs and premium payments;

"typical value" means an estimate of the representative greenhouse gas emission saving for a particular biofuel production pathway.

(2) Unless the context otherwise requires, words and phrases used in these Regulations which are also used in the Directive or in Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity, shall have the same meaning in these Regulations as they have in those directives.

Target for gross final consumption of energy.

3.(1) The Government shall ensure that the share of energy from renewable resources, as calculated in accordance with the provisions of regulations 5 to 11, in gross final consumption of energy in 2020 corresponds at least with the overall target for the energy from renewable resources for that year, as set out in the third column of the table in Schedule 1.

(2) In order to achieve the target laid down in this regulation more easily, the Government shall promote and encourage energy efficiency and energy saving.

(3) In order to reach the target set in subregulation (1) the Government may, inter alia, apply the following measures–

(a) support schemes;

(b) measures of cooperation with Member States and with third countries for achieving its overall target in accordance with regulations 5 to 11.

(4) Without prejudice to Articles 107 and 108 of the Treaty on the Functioning of the European Union, the Government shall have the right to decide, in accordance with regulations 5 to 11, the extent to which it supports energy from renewable sources which is produced in a Member State.

(5) The Government shall ensure that the share of energy from renewable sources in all forms of domestic transport in 2020 is at least 10% of the final consumption of energy in transport in Gibraltar.

(6) For the purposes of subregulation (5) the following provisions shall apply–

(a) for the calculation of the denominator, that is the total amount of energy consumed in transport, only petrol, diesel, biofuels consumed in road transport, and electricity shall be taken into account;

(b) for the calculation of the numerator, that is the amount of energy from renewable sources consumed in transport, all types of energy from renewable sources consumed in all forms of transport shall be taken into account;

(c) for the calculation of the contribution from electricity produced from renewable sources and consumed in all types of electric vehicles for the purpose of paragraphs (a) and (b), the Government may choose to use either the average share of electricity from renewable energy sources in the European Union or the share of electricity from renewable energy sources in Gibraltar as measured two years before the year in question and, for the calculation of the electricity from renewable energy sources consumed by electric road vehicles, that consumption shall be considered to be 2.5 times the energy content of the input of electricity from renewable energy sources.

(7) For the purposes of demonstrating compliance with renewable energy obligations placed on operators and the target for the use of energy from renewable sources in all forms of transport referred to in subregulation (5), the contribution made by biofuels produced from wastes, residues, non-food cellulosic material, and ligno-cellulosic material shall be considered to be twice that made by other biofuels.

Renewable energy action plan for Gibraltar.

4.(1) The Government shall adopt a renewable energy action plan for Gibraltar (the "Plan") in which there shall be set out the targets for the share of energy from renewable sources consumed in transport, electricity, heating and cooling in 2020, taking into account the effects of other policy measures relating to energy efficiency on final consumption of energy, and adequate measures to be taken to achieve those overall targets, including cooperation between the relevant authorities in Gibraltar, planned statistical transfers or joint projects, policies to develop existing biomass resources and mobilise new biomass resources for different uses, and the measures to be taken to fulfil the requirements of regulations 13 to 19.

(2) The Government shall ensure that the Plan is notified to the Commission as soon as is reasonably practicable after having first complied with subregulation (3).

(3) The Government shall publish, and shall ensure that the Commission is notified, six months before the Plan is due, a forecast document indicating–

(a) its estimated excess production of energy from renewable sources which could be transferred to Member States in accordance with regulations 6 to 11, as well as its estimated potential for joint projects, until 2020; and

(b) its estimated demand for energy from renewable sources to be satisfied by means other than domestic production until 2020,

and it may include elements relating to cost and benefits and financing.

(4) The Plan shall be drawn up in accordance with the template provided in Commission Decision 2009/548/EC of 30 June 2009 establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC of the European Parliament and of the Council.

Calculation of the share of energy from renewable sources.

5.(1) The gross final consumption of energy from renewable sources in Gibraltar shall be calculated as the sum of–

(a) gross final consumption of electricity from renewable energy sources;

(b) gross final consumption of energy from renewable sources for heating and cooling; and

(c) final consumption of energy from renewable sources in transport,

and gas, electricity and hydrogen from renewable energy sources shall be considered only once in paragraphs (a), (b), or (c), for calculating the share of gross final consumption of energy from renewable sources.

(2) The calculation of the gross final consumption of energy from renewable sources in subregulation (1) shall be done in accordance with the methodology set out in Part 1 of Schedule 2.

(3) Where the Government considers that, due to force majeure, it is impossible for it to meet its share of energy from renewable sources in gross final consumption of energy in 2020 set out in the third column of the table in Schedule 1, it shall ensure that the Commission is informed accordingly as soon as possible.

(4) Where, as a result of being notified pursuant to subregulation (3), the Commission issues a decision, these Regulations shall be construed in such a manner as to give effect to the provisions of that decision.

Statistical transfers.

6.(1) The Government may agree on and may make arrangements (which may be of one or more years duration) with Member States for the statistical transfer of a specified amount of energy from renewable sources.

(2) The transferred quantity shall be–

(a) deducted from the amount of energy from renewable sources that is taken into account in measuring compliance by the transferor with the requirements of regulation 3(1); and

(b) added to the amount of energy from renewable sources that is taken into account in measuring compliance by the transferee with the requirements of regulation 3(1),

but a statistical transfer shall not affect the achievement of the target of the transferor.

(3) An arrangement to which subregulation (1) applies shall be notified to the Commission no later than three months after the end of each year in which it has effect and such notification shall include the quantity and price of the energy involved.

(4) Transfers under this regulation shall become effective only after all the parties involved in the transfer have notified the transfer to the Commission.

Joint projects.

7.(1) The Government together with at least one Member State may cooperate on all types of joint projects relating to the production of electricity, heating or cooling from renewable energy sources, and that cooperation may involve private operators.

(2) The Government shall ensure that the Commission is notified of the proportion or amount of electricity, heating or cooling from renewable energy sources produced by any joint project in Gibraltar, that became operational after 25 June 2009, or by the increased capacity of an installation that was refurbished after that date, which is to be regarded as counting towards the national overall target of a Member State for the purposes of measuring compliance with the requirements of the Directive.

(3) The notification referred to in subregulation (2) shall–

(a) describe the proposed installation or identify the refurbished installation;

(b) specify the proportion or amount of electricity, heating or cooling produced from the installation which is to be regarded as counting towards the national overall target of that Member State;

(c) identify the Member State in whose favour the notification is being made; and

(d) specify the period, in whole calendar years, during which the electricity or heating or cooling produced by the installation from renewable energy sources is to be regarded as counting towards the national overall target of that Member State.

(4) The period specified under subregulation (3)(d) shall not extend beyond 2020 but the duration of a joint project may extend beyond 2020.

(5) A notification made under this regulation shall not be varied or withdrawn without the joint agreement of the Government and the Member State identified under subregulation (3)(c).

Effects of joint projects.

8.(1) Within three months of the end of each year falling within the period specified under regulation 7(3)(d), the Government, if a notification under regulation 7 was made, shall issue a letter of notification stating–

(a) the total amount of electricity, heating or cooling produced during the year from renewable energy sources by the installation which was the subject of the notification under regulation 7; and

(b) the amount of electricity, heating or cooling produced during the year from renewable energy sources by that installation which is to count towards the national overall target of a Member State in accordance with the terms of the notification.

(2) Where subregulation (1) applies, the Government shall ensure that the letter of notification is sent to the Member State in whose favour the notification was made and to the Commission.

(3) For the purposes of measuring target compliance with the requirements of these Regulations concerning national overall targets, the amount of electricity, heating or cooling from renewable energy sources notified in accordance with subregulation (1)(b) shall be–

(a) deducted from the amount of electricity, heating or cooling from renewable energy sources that is taken into account, in measuring compliance by the Government; and

(b) added to the amount of electricity, heating or cooling from renewable energy sources that is taken into account, in

measuring compliance by the Member State receiving the letter of notification in accordance with subregulation (2).

Joint projects and third countries.

9.(1) The Government, whether by itself or together with one or more Member States, may cooperate with one or more third countries on all types of joint projects regarding the production of electricity from renewable energy sources and such cooperation may involve private operators.

(2) Electricity from renewable energy sources produced in a third country shall be taken into account only for the purposes of measuring compliance with the requirements of these Regulations concerning overall targets if the following conditions are met–

(a) the electricity is consumed in the European Union, a requirement that is deemed to be met where–

(i) an equivalent amount of electricity to the electricity accounted for has been firmly nominated to the allocated interconnection capacity by all responsible transmission system operators in the country of origin, the country of destination and, if relevant, each third country of transit;

(ii) an equivalent amount of electricity to the electricity accounted for has been firmly registered in the schedule of balance by the responsible transmission system operator on the European Union side of an interconnector; and

(iii) the nominated capacity and the production of electricity from renewable energy sources by the installation referred to in paragraph (b) below refer to the same period of time;

(b) the electricity is produced by a newly constructed installation that became operational after 25 June 2009 or by the increased capacity of an installation that was refurbished after that date, under a joint project as referred to in subregulation (1); and

(c) the amount of electricity produced and exported has not received support from a support scheme of a third country other than investment aid granted to the installation.

(3) The Government may apply to the Commission, for the purposes of regulation 5, for account to be taken of electricity from renewable energy sources produced and consumed in a third country, in the context of the construction of an interconnector with a very long lead-time between Gibraltar and a third country if the following conditions are met–

(a) construction of the interconnector started by 31 December 2016;

(b) it is not possible for the interconnector to become operational by 31 December 2020;

(c) it is possible for the interconnector to become operational by 31 December 2022;

(d) after it becomes operational, the interconnector will be used for the export to the European Union, in accordance with subregulation (2), of electricity generated from renewable energy sources;

(e) the application relates to a joint project that fulfils the criteria in subregulation (2)(b) and (c) and that will use the interconnector after it becomes operational, and to a quantity of electricity that is no greater than the quantity that will be exported to the European Union after the interconnector becomes operational.

(4) The proportion or amount of electricity produced by any installation in the territory of a third country, which is to be regarded as counting towards the overall target for Gibraltar for the purposes of measuring compliance with regulation 3, shall be notified to the Commission, and when Gibraltar and one or more Member States are concerned, the distribution of this proportion or amount between Gibraltar and such Member State or States shall be notified to the Commission.

(5) The proportion or amount referred to in subregulation (4) shall not exceed the proportion or amount actually exported to, and consumed in, the European Union, corresponding to the amount referred to in subregulation (2)(a)(i) and (ii) and meeting the conditions as set out in subregulation (2)(a).

(6) The notification referred to in subregulation (4) shall be made if the proportion or amount of electricity is to count towards Gibraltar's overall target.

(7) The notification referred to in subregulation (4) shall–

(a) describe the proposed installation or identify the refurbished installation;

(b) specify the proportion or amount of electricity produced from the installation which is to be regarded as counting towards the overall target as well as, subject to confidentiality requirements, the corresponding financial arrangements;

(c) specify the period, in whole calendar years, during which the electricity is to be regarded as counting towards the overall target; and

(d) include a written acknowledgement of paragraphs (b) and (c) by the third country in whose territory the installation is to become operational and the proportion or amount of electricity produced by the installation which will be used domestically by that third country.

(8) The period specified under subregulation (7)(c) shall not extend beyond 2020, but the duration of a joint project may extend beyond 2020.

(9) A notification made under this regulation may not be varied or withdrawn without the joint agreement of the Government and the third country that has acknowledged the joint project in accordance with subregulation (7)(d).

Effects of joint projects and third countries.

10.(1) Within three months of the end of each year falling within the period specified under regulation 9(7)(c), the Government, if a notification under regulation 9 was made, shall issue a letter of notification stating–

(a) the total amount of electricity produced during that year from renewable energy sources by the installation which was the subject of the notification under regulation 9;

(b) the amount of electricity produced during the year from renewable energy sources by that installation which is to count towards the national overall target in accordance with the terms of the notification under regulation 9; and

(c) proof of compliance with the conditions set out in regulation 9(2).

(2) The Government shall ensure that the letter of notification is sent to the third country which has acknowledged the project in accordance with regulation 9(7)(d) and to the Commission.

(3) For the purposes of measuring target compliance with the requirements of these Regulations concerning national overall targets, the amount of electricity produced from renewable energy sources notified in accordance with subregulation (1)(b) shall be added to the amount of energy from renewable sources that is taken into account in measuring compliance by Gibraltar.

Joint support schemes.

11.(1) Without prejudice to the Government's obligations under regulation 3, the Government and one or more Member States (the "parties) may decide, on a voluntary basis, to join or partly coordinate support schemes and, where this is agreed, a certain amount of energy from renewable sources produced in the territory of one party may count towards the overall target of another party if the Government and the Member State or States concerned–

(a) make a statistical transfer of specified amounts of energy from renewable sources from one to the other in accordance with Article 6 of the Directive; or

(b) set up a distribution rule agreed by the parties that allocates amounts of energy from renewable sources between them,

and the Government shall ensure that such a rule is notified to the Commission no later than 3 months after the end of the first year in which it takes effect.

(2) If the Government has made a notification under subregulation (1), within 3 months of the end of each year it shall issue a letter of notification stating the total amount of electricity, heating or cooling from renewable energy sources produced during the year which is to be the subject of the distribution rule.

(3) For the purposes of measuring compliance concerning overall targets, the amount of electricity, heating or cooling from renewable energy sources

notified in accordance with subregulation (2) shall be reallocated between the parties concerned in accordance with the notified distribution rule.

Capacity increases.

12. For the purpose of regulations 7(2) and 9(2)(b), units of energy from renewable sources imputable to an increase in the capacity of an installation shall be treated as if they were produced by a separate installation becoming operational at the moment at which the increase of capacity occurred.

Administrative procedures, regulations and codes.

13.(1) The Government shall ensure that any rules concerning the authorisation, certification and licensing procedures that are applied to plants and associated transmission and distribution network infrastructures for the production of electricity, heating or cooling from renewable energy sources, and to the process of transformation of biomass into biofuels or other energy products, are proportionate and necessary.

(2) The Government shall, in particular, take the appropriate steps to ensure that–

(a) the respective responsibilities of the bodies responsible for authorisation, certification and licensing procedures, including spatial planning, are clearly coordinated and defined, with transparent timetables for determining planning and building applications;

(b) comprehensive information on the processing of authorisation, certification and licensing applications for renewable energy installations and on available assistance to applicants are made available at the appropriate level;

(c) administrative procedures are streamlined and expedited at the appropriate administrative level;

(d) rules governing authorisations, certifications and licensing are objective, transparent, proportionate, do not discriminate between applicants and take fully into account the particularities of individual renewable energy technologies;

(e) administrative charges paid by consumers, planners, architects, builders and equipment and system installers and suppliers are transparent and cost-related; and

(f) simplified and less burdensome authorisation procedures, including through simple notification if allowed by the applicable regulatory framework, are established for smaller projects and for decentralised devices for producing energy from renewable sources, where appropriate.

(3) The Government shall clearly define any technical specifications which must be met by renewable energy equipment and systems in order to benefit from support schemes; and where European standards that are applicable in Gibraltar exist, including eco-labels, energy labels and other technical reference systems established by the European standardisation bodies, such technical specifications shall be expressed in terms of those standards, but such technical specifications shall not prescribe where the equipment and systems are to be certified.

(4) The Government shall recommend to all actors, in particular administrative bodies, to ensure equipment and systems are installed for the use of electricity, heating and cooling from renewable energy sources and for district heating and cooling when planning, designing, building and renovating industrial or residential areas, and shall, in particular, encourage administrative bodies to include heating and cooling from renewable energy sources in the planning of city infrastructure, where appropriate.

(5) The Government shall ensure that new public buildings, and existing public buildings that are subject to major renovation, fulfil an exemplary role in the context of these Regulations from 1 January 2012 onwards.

(6) The Government may allow the obligation referred to in subregulation (5) to be fulfilled by complying with standards for zero energy housing or by providing that the roofs of public or mixed private-public buildings are used by third parties for installations that produce energy from renewable sources.

(7) The Government shall take measures to promote the use of renewable energy heating and cooling systems and equipment that achieve a significant reduction of energy consumption and, in doing so, shall use energy or eco-labels or other appropriate certificates or standards developed at national or European Union level, where these exist and apply to Gibraltar, as the basis for encouraging such systems and equipment.

(8) The Government shall take measures to promote–

(a) in the case of biomass, conversion technologies that achieve a conversion efficiency of at least 85% for residential and

commercial applications and at least 70% for industrial applications;

(b) in the case of heat pumps, those that fulfil the minimum requirements of eco-labelling established in Commission Decision 2007/742/EC of 9 November 2007 establishing the ecological criteria for the award of the Community eco-label to electrically driven, gas driven or gas absorption heat pumps;

(c) in the case of solar thermal energy, certified equipment and systems based on European standards where these exist and apply in Gibraltar, including eco-labels, energy labels and other technical reference systems established by the European standardisation bodies;

(9) In assessing the conversion efficiency and input/output ratio of systems and equipment for the purposes of subregulation (8), the Government shall use European Union or, in their absence, international procedures if such procedures exist.

Information and training.

14.(1) The Government shall ensure that information on support measures is made available to all relevant actors, such as consumers, builders, installers, architects, and suppliers of heating, cooling and electricity equipment and systems and of vehicles compatible with the use of energy from renewable sources.

(2) The Government shall ensure that information on the net benefits, cost and energy efficiency of equipment and systems for the use of heating, cooling and electricity from renewable energy sources is made available either by the–

(a) supplier of the equipment or system; or

(b) relevant competent authorities in Gibraltar.

(3) The Government shall, by 31 December 2012, ensure that certification schemes or equivalent qualification schemes–

(a) become or are available for installers of small-scale biomass boilers and stoves, solar photovoltaic and solar thermal systems, shallow geothermal systems and heat pumps;

(b) are based on the criteria laid down in Schedule 3,

and those schemes may take into account existing schemes and structures as appropriate.

(4) The Government shall recognise a certification awarded by a Member State where it is issued in accordance with the criteria laid down in Annex IV of the Directive.

(5) The Government shall make available to the public information on certification schemes or equivalent qualification schemes as referred to in subregulation (3) and may also make available the list of installers who are qualified or certified in accordance with the provisions referred to in subregulation (3).

(6) The Government shall ensure that guidance is made available to all relevant actors, notably for planners and architects, so that they are able properly to consider the optimal combination of renewable energy sources, of high-efficiency technologies and of district heating and cooling when planning, designing, building and renovating industrial or residential areas.

(7) The Government shall develop suitable information, awareness-raising, guidance or training programmes in order to inform citizens of the benefits and practicalities of developing and using energy from renewable sources.

Guarantees of origin.

15.(1) The Minister with responsibility for the environment is appointed as the competent authority for the issue, transfer and cancellation of guarantees of origin, and any other duties imposed upon him under these Regulations.

(2) Subject to the provisions of these Regulations, the competent authority shall issue a guarantee of origin upon the application of a producer of electricity from renewable energy sources.

(3) Producers of heating and cooling from renewable energy sources may apply for a guarantee of origin if the Government has, by notice in the Gazette, declared that the scope of subregulation (2) has been extended so as to include them.

(4) A guarantee of origin–

(a) shall be of the standard size of 1 MWh;

(b) may only be issued in respect of each unit of energy produced;

(c) may be made subject to a minimum capacity limit; and

(d) shall contain at least the following information–

(i) the energy source from which the energy was produced and the start and end dates of production;

(ii) whether it relates to–

(aa) electricity; or

(bb) heating or cooling;

(iii) the identity, location, type and capacity of the installation where the energy was produced;

(iv) whether, and to what extent, the installation has benefited from investment support, whether, and to what extent, the unit of energy has benefited in any other way from a support scheme, and the type of support scheme;

(v) the date on which the installation became operational; and

(vi) the date and country of issue and a unique identification number.

(5) In issuing a guarantee of origin the competent authority shall ensure that the same unit of energy from renewable sources is taken into account only once.

(6) A guarantee of origin shall be valid for the period of 12 months from the date of production of the corresponding energy unit.

(7) A guarantee of origin shall be cancelled once it has been used or after the expiry of the period referred to in subregulation (6).

(8) The competent authority shall ensure that guarantees of origin are accurate, reliable and fraud-resistant.

Electronic register.

16. The competent authority shall create and maintain a register that will permit guarantees of origin to be–

(a) issued;

(b) transferred; and

(c) cancelled,

electronically.

Recognition of guarantees of origin.

17. The competent authority shall recognise guarantees of origin issued by Member States in accordance with the Directive exclusively as proof of the elements referred to in regulation 15(4)(d)(i) to (vi) except where it has well-founded doubts about its accuracy, reliability or veracity.

Procedure upon refusal of recognition.

18.(1) Where the competent authority refuses the recognition of a guarantee of origin issued in a Member State, the competent authority shall ensure that the Commission is notified of such a refusal and the reasons justifying its refusal.

(2) If, after having received notification referred to in subregulation (1), the Commission finds that the refusal is unfounded and has adopted a decision to that effect, the competent authority shall recognise that guarantee of origin.

Guarantees of origin: miscellaneous.

19.(1) The guarantee of origin shall have no function in terms of compliance with regulation 3.

(2) Transfers of guarantees of origin, separately or together with the physical transfer of energy, shall have no effect on the decision whether to use statistical transfers, joint projects or joint support schemes for target compliance or on the calculation of the gross final consumption of energy from renewable sources in accordance with regulation 5.

Electricity supply.

20.(1) The Government shall take the appropriate steps to develop transmission and distribution grid infrastructure, intelligent networks, storage facilities and the electricity system, in order to allow the secure operation of the electricity system as it accommodates the further development of electricity production from renewable energy sources, including interconnection between Gibraltar and Member States and between Gibraltar and third countries and shall also take appropriate steps to accelerate authorisation procedures for grid infrastructure and to coordinate approval of grid infrastructure with administrative and planning procedures.

(2) Subject to requirements relating to the maintenance of the reliability and safety of the grid, based on transparent and non-discriminatory criteria, the Government shall–

(a) ensure that transmission system operators and distribution system operators in Gibraltar guarantee the transmission and distribution of electricity produced from renewable energy sources;

(b) provide for either priority access or guaranteed access to the grid-system of electricity produced from renewable energy sources;

(c) shall ensure that when dispatching electricity generating installations, transmission system operators shall give priority to generating installations using renewable energy sources in so far as the secure operation of the electricity system in Gibraltar permits and based on transparent and non-discriminatory criteria.

(3) The Government shall ensure that appropriate grid and market-related operational measures are taken in order to minimise the curtailment of electricity produced from renewable energy sources.

(4) If significant measures are taken to curtail the renewable energy sources in order to guarantee the security of the electricity system in Gibraltar and security of energy supply, the Government shall ensure that the responsible system operators report to the competent regulatory authority on those measures and indicate which corrective measures they intend to take in order to prevent inappropriate curtailments.

(5) The Government shall take appropriate measures to require transmission system operators and distribution system operators to set up and make public their standard rules relating to the bearing and sharing of

costs of technical adaptations, such as grid connections and grid reinforcements, improved operation of the grid and rules on the non-discriminatory implementation of the grid codes, which are necessary in order to integrate new producers feeding electricity produced from renewable energy sources into the interconnected grid.

(6) The rules referred to in subregulation (5)–

(a) shall be based on objective, transparent and non-discriminatory criteria taking particular account of all the costs and benefits associated with the connection of those producers to the grid; and

(b) may provide for different types of connection.

(7) Where appropriate, the Government may require transmission system operators and distribution system operators to bear, in full or in part, the costs referred to in subregulation (5).

(8) The Government shall review and take the necessary measures to improve the frameworks and rules for the bearing and sharing of costs referred to in subregulation (5) by the date of the coming into operation of these Regulations, by 30 June 2013 and every two years thereafter to ensure the integration of new producers as referred to in that subregulation.

(9) The Government shall require transmission system operators and distribution system operators to provide any new producer of energy from renewable sources wishing to be connected to the system with the comprehensive and necessary information required, including–

(a) a comprehensive and detailed estimate of the costs associated with the connection;

(b) a reasonable and precise timetable for receiving and processing the request for grid connection;

(c) a reasonable indicative timetable for any proposed grid connection.

(10) The Government may allow producers of electricity from renewable energy sources wishing to be connected to the grid to issue a call for tender for the connection work.

(11) The Government shall enforce the sharing of costs referred in subregulation (5) by a mechanism based on objective, transparent and non-discriminatory criteria taking into account the benefits which initially and subsequently connected producers as well as transmission system operators and distribution system operators derive from the connections.

(12) The Government shall take measures to ensure that–

(a) the charging of transmission and distribution tariffs does not discriminate against electricity from renewable energy sources;

(b) the charging of transmission and distribution tariffs does not discriminate against gas from renewable energy sources;

(c) tariffs charged by transmission system operators and distribution system operators for the transmission and distribution of electricity from plants using renewable energy sources reflect realisable cost benefits resulting from the plant's connection to the network; such cost benefits could arise from the direct use of the low-voltage grid.

District heating and cooling.

21.(1) In the Plan the Government shall assess the necessity to build new infrastructure for district heating and cooling produced from renewable energy sources in order to achieve the 2020 target referred to in regulation 3.

(2) Subject to that assessment, and if relevant, the Government shall take steps with a view to developing a district heating infrastructure to accommodate the development of heating and cooling production from large biomass, solar and geothermal facilities.

Reporting to the Commission.

22.(1) The Government shall ensure that a report is submitted to the Commission on progress in the promotion and use of energy from renewable sources by 31 December 2011, and every two years thereafter, and the sixth report, to be submitted by 31 December 2021, shall be the last report required.

(2) The report referred to in subregulation (1) shall detail, in particular–

(a) the sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources in the

preceding two calendar years and the measures taken or planned in Gibraltar to promote the growth of energy from renewable sources ;

(b) the introduction and functioning of support schemes and other measures to promote energy from renewable sources, and any developments in the measures used with respect to those set out in the Plan;

(c) how, where applicable, the Government has structured its support schemes to take into account renewable energy applications that give additional benefits in relation to other, comparable applications, but may also have higher costs, including biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material;

(d) the functioning of the system of guarantees of origin for electricity, heating and cooling from renewable energy sources and the measures taken to ensure the reliability and protection against fraud of the system;

(e) progress made in evaluating and improving administrative procedures to remove regulatory and non-regulatory barriers to the development of energy from renewable sources;

(f) measures taken to ensure the transmission and distribution of electricity produced from renewable energy sources, and to improve the framework or rules for bearing and sharing of costs referred to in regulation 20(5) and (6);

(g) developments in the availability and use of biomass resources for energy purposes;

(h) changes in commodity prices and land use within Gibraltar associated with its increased use of biomass and other forms of energy from renewable sources;

(i) the development and share of biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material;

(j) the estimated impact of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality within Gibraltar;

(k) the estimated net greenhouse gas emission saving due to the use of energy from renewable sources;

(l) the estimated excess production of energy from renewable sources which could be transferred to Member States, as well as the estimated potential for joint projects, until 2020;

(m) the estimated demand for energy from renewable sources to be satisfied by means other than domestic production until 2020; and

(n) information on how the share of biodegradable waste in waste used for producing energy has been estimated, and what steps have been taken to improve and verify such estimates.

(3) In estimating net greenhouse gas emission saving from the use of biofuels, the Government may, for the purpose of the reports referred to in subregulation (1) use the typical values given in part A and part B of Schedule 4.

(4) The first report submitted under this regulation shall outline whether the Government intends to–

(a) establish a single administrative body responsible for processing authorisation, certification and licensing applications for renewable energy installations and providing assistance to applicants;

(b) provide for automatic approval of planning and permit applications for renewable energy installations where the authorising body has not responded within the set time limits; or

(c) indicate geographical locations suitable for exploitation of energy from renewable sources in land-use planning and for the establishment of district heating and cooling.

(5) In each report the Government may correct the data of the previous reports.

Information on renewable sources of energy for transport.

23. The Government shall ensure that the public is informed of the availability and environmental benefits of all different renewable sources of energy for transport.

Provision of information at point of sale.

24.(1) No person shall sell, or offer for sale, fuel intended to be used for transport where the percentages of biofuels, blended in mineral oil derivatives, exceed 10% by volume, unless the words "Biofuel blend exceeds 10% by volume" are displayed prominently on any dispenser from which such fuel is sold or offered for sale.

(2) A person who sells fuel in breach of subregulation (1) is guilty of an offence and liable on summary conviction to a fine up to level 3 on the standard scale.

SCHEDULE 1

OVERALL TARGETS FOR THE SHARE OF ENERGY FROM RENEWABLE SOURCES IN GROSS FINAL CONSUMPTION OF ENERGY IN 2020[1]

Regulation 3(1),5(3)

Overall target

	Share of energy from renewable sources in gross final consumption of energy, 2005 (S_{2005})	Target for share of energy from renewable sources in gross final consumption of energy, 2020 (S_{2020})
Gibraltar		15%

[1] In order to be able to achieve the objective set out in this Schedule, it is underlined that the EU's State aid guidelines for environmental protection recognise the continued need for national mechanisms of support for the promotion of energy from renewable sources.

SCHEDULE 2

METHOD FOR THE CALCULATION OF ENERGY FROM RENEWABLE SOURCES

Regulation 5(2)

Part 1

1. For the purposes of regulation 5(1)(a), gross final consumption of electricity from renewable energy sources shall be calculated as the quantity of electricity produced in Gibraltar from renewable energy sources, excluding the production of electricity in pumped storage units from water that has previously been pumped uphill.

2. In multi-fuel plants using renewable and conventional sources, only the part of electricity produced from renewable energy sources shall be taken into account. For the purposes of this calculation, the contribution of each energy source shall be calculated on the basis of its energy content.

3. The electricity generated by hydropower and wind power shall be accounted for in accordance with the normalisation rules set out in Part 2.

4. For the purposes of regulation 5(1)(b), the gross final consumption of energy from renewable sources for heating and cooling shall be calculated as the quantity of district heating and cooling produced in Gibraltar from renewable sources, plus the consumption of other energy from renewable sources in industry, households, services, agriculture, forestry and fisheries, for heating, cooling and processing purposes.

5. In multi-fuel plants using renewable and conventional sources, only the part of heating and cooling produced from renewable energy sources shall be taken into account. For the purposes of this calculation, the contribution of each energy source shall be calculated on the basis of its energy content.

6. Aerothermal, geothermal and hydrothermal heat energy captured by heat pumps shall be taken into account for the purposes of regulation 5(1)(b) provided that the final energy output significantly exceeds the primary energy input required to drive the heat pumps. The quantity of heat to be considered as energy from renewable sources for the purposes of these Regulations shall be calculated in accordance with the methodology laid down in Part 3.

7. Thermal energy generated by passive energy systems, under which lower energy consumption is achieved passively through building design or from heat generated by energy from non-renewable sources, shall not be taken into account for the purposes of regulation 5(1)(b).

8. The energy content of the transport fuels listed in Part 4 shall be taken to be as set out in that Part.

9. The share of energy from renewable sources shall be calculated as the gross final consumption of energy from renewable sources divided by the gross final consumption of energy from all energy sources, expressed as a percentage.

10. For the purposes of paragraph 9, the sum referred to in regulation 5(1) shall be adjusted in accordance with regulations 6, 8, 10 and 11.

11. The methodology and definitions used in the calculation of the share of energy from renewable sources shall be those of Regulation (EC) No 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics, as amended from time to time.

12. The Government shall ensure coherence of statistical information used in calculating those sectoral and overall shares and statistical information reported to the Commission under Regulation (EC) No 1099/2008.

Part 2

Normalisation rule for accounting for electricity generated from hydropower and wind power

The following rule shall be applied for the purpose of accounting for electricity generated from hydropower in Gibraltar:

$$Q_{N(norm)} = C_N \times \left[\sum_{i=N-14}^{N} \frac{Q_i}{C_i} \right] / 15$$

where:

N = reference year;

$Q_{N(norm)}$ = normalised electricity generated by all hydropower plants in Gibraltar in year *N*, for accounting purposes;

Q_i = the quantity of electricity actually generated in year *i* by all hydropower plants in Gibraltar measured in GWh, excluding production from pumped storage units using water that has previously been pumped uphill;

C_i = the total installed capacity, net of pumped storage, of all hydropower plants in Gibraltar at the end of year *i*, measured in MW.

The following rule shall be applied for the purpose of accounting for electricity generated from wind power in Gibraltar:

$$Q_{N(norm)} = \frac{C_N + C_{N-1}}{2} \times \frac{\sum_{i=N-n}^{N} Q_i}{\sum_{j=N-n}^{N} \left(\frac{C_j + C_{j-1}}{2} \right)}$$

where:

N=reference year;

$Q_{N(norm)}$ = normalised electricity generated by all wind power plants in Gibraltar in year *N*, for accounting purposes;

Q = the quantity of electricity actually generated in year *i* by all wind power plants in Gibraltar measured in GWh;

C_j = the total installed capacity of all the wind power plants in Gibraltar at the end of year *j*, measured in MW;

n = 4 or the number of years preceding year *N* for which capacity and production data are available for Gibraltar, whichever is lower

Part 3

Accounting of energy from heat pumps

The amount of aerothermal, geothermal or hydrothermal energy captured by heat pumps to be considered energy from renewable sources for the purposes of this Directive, E_{RES}, shall be calculated in accordance with the following formula:

$E_{RES} = Q_{usable} \times (1 - 1/SPF)$

where

- Q_{usable} = the estimated total usable heat delivered by heat pumps fulfilling the criteria referred to in paragraphs 4 to 7 of Part 1, implemented as follows:

Only heat pumps for which $SPF > 1.15 \times 1/\eta$ shall be taken into account,

- SPF = the estimated average seasonal performance factor for those heat pumps,

- η is the ratio between total gross production of electricity and the primary energy consumption for electricity production and shall be calculated as an EU average based on Eurostat data.

Part 4

Energy content of transport fuels

Fuel	Energy content by weight (lower calorific value, MJ/kg)	Energy content by volume (lower calorific value, MJ/l)
Bioethanol (ethanol produced from biomass)	27	21
Bio-ETBE (ethyl-tertio-butyl-ether produced on the basis of bioethanol)	36 (of which 37% from renewable sources)	27 (of which 37% from renewable sources)
Biomethanol (methanol produced from biomass, to be used as biofuel)	20	16
Bio-MTBE (methyl-tertio-butyl-ether produced on the basis of bio-methanol)	35 (of which 22% from renewable sources)	26 (of which 22% from renewable sources)
Bio-DME (dimethylether produced from biomass, to be used as biofuel)	28	19
Bio-TAEE (tertiary-amyl-ethyl-ether produced on the basis of bioethanol)	38 (of which 29% from renewable sources)	29 (of which 29% from renewable sources)
Biobutanol (butanol produced from biomass, to be used as biofuel)	33	27
Biodiesel (methyl-ester produced from vegetable or animal oil, of diesel quality, to be used as biofuel)	37	33
Fischer-Tropsch diesel (a synthetic hydrocarbon or mixture of synthetic	44	34

hydrocarbons produced from biomass)		
Hydrotreated vegetable oil (vegetable oil thermochemically treated with hydrogen)	44	34
Pure vegetable oil (oil produced from oil plants through pressing, extraction or comparable procedures, crude or refined but chemically unmodified, when compatible with the type of engines involved and the corresponding emission requirements)	37	34
Biogas (a fuel gas produced from biomass and/or from the biodegradable fraction of waste, that can be purified to natural gas quality, to be used as biofuel, or wood gas)	50	—
Petrol	43	32
Diesel	43	36

SCHEDULE 3
CERTIFICATION OF INSTALLERS

Regulation 14(3)

The certification schemes or equivalent qualification schemes referred to in regulation 14 shall be based on the following criteria:

1. The certification or qualification process shall be transparent and clearly defined by the Member State or the administrative body they appoint.

2. Biomass, heat pump, shallow geothermal and solar photovoltaic and solar thermal installers shall be certified by an accredited training programme or training provider.

3. The accreditation of the training programme or provider shall be effected by the Government or administrative bodies it appoints. The accrediting body shall ensure that the training programme offered by the training provider has continuity. The training provider shall have adequate technical facilities to provide practical training, including some laboratory equipment or corresponding facilities to provide practical training. The training provider shall also offer in addition to the basic training, shorter refresher courses on topical issues, including on new technologies, to enable life-long learning in installations. The training provider may be the manufacturer of the equipment or system, institutes or associations.

4. The training leading to installer certification or qualification shall include both theoretical and practical parts. At the end of the training, the installer must have the skills required to install the relevant equipment and systems to meet the performance and reliability needs of the customer, incorporate quality craftsmanship, and comply with all applicable codes and standards, including energy and eco-labelling.

5. The training course shall end with an examination leading to a certificate or qualification. The examination shall include a practical assessment of successfully installing biomass boilers or stoves, heat pumps, shallow geothermal installations, solar photovoltaic or solar thermal installations.

6. The certification schemes or equivalent qualification schemes referred to in regulation 14(3) shall take due account of the following guidelines:

(a) Accredited training programmes should be offered to installers with work experience, who have undergone, or are undergoing, the following types of training:

(i) in the case of biomass boiler and stove installers: training as a plumber, pipe fitter, heating engineer or technician of sanitary and heating or cooling equipment as a prerequisite;

(ii) in the case of heat pump installers: training as a plumber or refrigeration engineer and have basic electrical and plumbing skills (cutting pipe, soldering pipe joints, gluing pipe joints, lagging, sealing fittings, testing for leaks and installation of heating or cooling systems) as a prerequisite;

(iii) in the case of a solar photovoltaic or solar thermal installer: training as a plumber or electrician and have plumbing, electrical and roofing skills, including knowledge of soldering pipe joints, gluing pipe joints, sealing fittings, testing for plumbing leaks, ability to connect wiring, familiar with basic roof materials, flashing and sealing methods as a prerequisite; or

(iv) a vocational training scheme to provide an installer with adequate skills corresponding to a three years education in the skills referred to in point (a), (b) or (c) including both classroom and workplace learning.

(b) The theoretical part of the biomass stove and boiler installer training should give an overview of the market situation of biomass and cover ecological aspects, biomass fuels, logistics, fire protection, related subsidies, combustion techniques, firing systems, optimal hydraulic solutions, cost and profitability comparison as well as the design, installation, and maintenance of biomass boilers and stoves. The training should also provide good knowledge of any European standards for technology and biomass fuels, such as pellets, and biomass related domestic and European Union law.

(c) The theoretical part of the heat pump installer training should give an overview of the market situation for heat pumps and cover geothermal resources and ground source temperatures of different regions, soil and rock identification for thermal

conductivity, regulations on using geothermal resources, feasibility of using heat pumps in buildings and determining the most suitable heat pump system, and knowledge about their technical requirements, safety, air filtering, connection with the heat source and system layout. The training should also provide good knowledge of any European standards for heat pumps, and of relevant domestic and European Union law. The installer should demonstrate the following key competences:

(i) a basic understanding of the physical and operation principles of a heat pump, including characteristics of the heat pump circle: context between low temperatures of the heat sink, high temperatures of the heat source, and the efficiency of the system, determination of the coefficient of performance (COP) and seasonal performance factor (SPF);

(ii) an understanding of the components and their function within a heat pump circle, including the compressor, expansion valve, evaporator, condenser, fixtures and fittings, lubricating oil, refrigerant, superheating and sub-cooling and cooling possibilities with heat pumps; and

(iii) the ability to choose and size the components in typical installation situations, including determining the typical values of the heat load of different buildings and for hot water production based on energy consumption, determining the capacity of the heat pump on the heat load for hot water production, on the storage mass of the building and on interruptible current supply; determine buffer tank component and its volume and integration of a second heating system.

(d) The theoretical part of the solar photovoltaic and solar thermal installer training should give an overview of the market situation of solar products and cost and profitability comparisons, and cover ecological aspects, components, characteristics and dimensioning of solar systems, selection of accurate systems and dimensioning of components, determination of the heat demand, fire protection, related subsidies, as well as the design, installation, and maintenance of solar photovoltaic and solar thermal installations. The training should also provide good knowledge of any European standards for technology, and certification such as Solar

Keymark, and related domestic and European Union law. The installer should demonstrate the following key competences:

(i) the ability to work safely using the required tools and equipment and implementing safety codes and standards and identify plumbing, electrical and other hazards associated with solar installations;

(ii) the ability to identify systems and their components specific to active and passive systems, including the mechanical design, and determine the components' location and system layout and configuration;

(iii) the ability to determine the required installation area, orientation and tilt for the solar photovoltaic and solar water heater, taking account of shading, solar access, structural integrity, the appropriateness of the installation for the building or the climate and identify different installation methods suitable for roof types and the balance of system equipment required for the installation; and

(iv) for solar photovoltaic systems in particular, the ability to adapt the electrical design, including determining design currents, selecting appropriate conductor types and ratings for each electrical circuit, determining appropriate size, ratings and locations for all associated equipment and subsystems and selecting an appropriate interconnection point.

(e) The installer certification should be time restricted, so that a refresher seminar or event would be necessary for continued certification.

SCHEDULE 4

RULES FOR CALCULATING THE GREENHOUSE GAS IMPACT OF BIOFUELS, BIOLIQUIDS AND THEIR FOSSIL FUEL COMPARATORS

Regulation 22(3)

Part A

Typical and default values for biofuels if produced with no net carbon emissions from land-use change

Biofuel production pathway	Typical greenhouse gas emission saving	Default greenhouse gas emission saving
sugar beet ethanol	61 %	52 %
wheat ethanol (process fuel not specified)	32 %	16 %
wheat ethanol (lignite as process fuel in CHP plant)	32 %	16 %
wheat ethanol (natural gas as process fuel in conventional boiler)	45 %	34 %
wheat ethanol (natural gas as process fuel in CHP plant)	53 %	47 %
wheat ethanol (straw as process fuel in CHP plant)	69 %	69 %
corn (maize) ethanol, Community produced (natural gas as process fuel in CHP plant)	56 %	49 %
sugar cane ethanol	71 %	71 %
the part from renewable sources of ethyl-tertio-butyl-ether (ETBE)	Equal to that of the ethanol production pathway used	
the part from renewable sources of tertiary-amyl-ethyl-ether (TAEE)	Equal to that of the ethanol production pathway used	
rape seed biodiesel	45 %	38 %
sunflower biodiesel	58 %	51 %
soybean biodiesel	40 %	31 %
palm oil biodiesel (process not specified)	36 %	19 %
palm oil biodiesel (process with methane capture at oil mill)	62 %	56 %
waste vegetable or animal (*) oil biodiesel	88 %	83 %
hydrotreated vegetable oil from rape seed	51 %	47 %
hydrotreated vegetable oil from sunflower	65 %	62 %
hydrotreated vegetable oil from palm oil (process not specified)	40 %	26 %
hydrotreated vegetable oil from palm oil (process with methane capture at oil mill)	68 %	65 %
pure vegetable oil from rape seed	58 %	57 %
biogas from municipal organic waste as compressed natural gas	80 %	73 %
biogas from wet manure as compressed natural gas	84 %	81 %
biogas from dry manure as compressed natural gas	86 %	82 %

(*) Not including animal oil produced from animal by-products classified as category 3 material in accordance with Regulation (EC) No 1774/2002 of the European Parliament and of the Council of 3 October 2002 laying down health rules on animal by-products not intended for human consumption.

Part B

Estimated typical and default values for future biofuels that were not on the market or were on the market only in negligible quantities in January 2008, if produced with no net carbon emissions from land-use change

Biofuel production pathway	Typical greenhouse gas emission saving	Default greenhouse gas emission saving
wheat straw ethanol	87 %	85 %
waste wood ethanol	80 %	74 %
farmed wood ethanol	76 %	70 %
waste wood Fischer-Tropsch diesel	95 %	95 %
farmed wood Fischer-Tropsch diesel	93 %	93 %
waste wood dimethylether (DME)	95 %	95 %
farmed wood DME	92 %	92 %
waste wood methanol	94 %	94 %
farmed wood methanol	91 %	91 %
the part from renewable sources of methyl-tertio-butyl-ether (MTBE)	Equal to that of the methanol production pathway used	