

12TH OCTOBER, 2021

COMMENTS ON ENERGY COMMISSION (ENERGY EFFICIENCY STANDARDS AND LABELLING) (RENEWABLE ENERGY BATTERIES) REGULATIONS, 2021

1. General Comment

(a) In view of the definition provided for “renewable energy batteries” under regulation 44, the title of the Regulations has been revised to achieve consistency.

(b) For purposes of clarity and consistency, “battery” and “batteries” have been replaced with “renewable energy battery” and “renewable energy batteries” respectively throughout the Regulations.

2. In view of the fact that the label for batteries for renewable energy storage has no star rating, kindly clarify the following:

(a) Regulation 11 – Labelling and information requirements

Whether paragraph (h) of subregulation (1) applies in these Regulations.

(b) Second Schedule – Minimum energy performance standards

(i) Whether the phrase “7-star energy efficiency rating” used in the fourth paragraph of Part One applies in these Regulations.

(ii) Whether the phrase “star rating classification” used in the second paragraph of Part Two applies in these Regulations.

(c) Fourth Schedule – Product Information Sheet

Whether the phrase “efficiency star rating” used in paragraph (v) of Table 2 of Part Three applies in these Regulations.

3. Regulation 9 – Use of circumvention device

Kindly clarify whether this provision applies in these Regulations.

4. Regulation 44 – Interpretation

Kindly provide the definition for “force majeure”.

12TH OCTOBER, 2021

**ENERGY COMMISSION (ENERGY EFFICIENCY STANDARDS AND LABELLING)
(RENEWABLE ENERGY BATTERIES) REGULATIONS, 2021**

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**ENERGY COMMISSION (ENERGY EFFICIENCY STANDARDS AND LABELLING)
(RENEWABLE ENERGY BATTERIES) REGULATIONS, 2021**

IN exercise of the power conferred on the Minister responsible for Energy by subparagraph (i) of paragraph (a) of subsection (1) of section 56 of the Energy Commission Act, 1997 (Act 541) and on the advice of the Board, these Regulations are made this day of 2021.

Preliminary Provisions

Purpose of regulations

1. The purpose of these Regulations is to promote the efficient use and conservation of energy and mitigate related climate change by
 - (a) providing for
 - (i) the enforcement of Standards set out in the First Schedule and the minimum energy performance standards set out in Part One of the Second Schedule;
 - (ii) the labelling of renewable energy batteries;
 - (iii) supplementary product information on renewable energy batteries; and
 - (iv) the registration of models of renewable energy batteries in the Appliance Energy Efficiency Register; and
 - (b) prohibiting the manufacture, importation, sale, storage, donation, disposal, installation or use of a renewable energy battery that does not meet the minimum energy performance standards set out in the Second Schedule.

Application of regulations

2. (1) These Regulations apply to
 - (a) a renewable energy battery manufactured in the country or imported into the country for display and sale or use;

- (b) a method of test used for the verification of renewable energy battery performances; and
 - (c) a battery used in renewable energy storage systems for use in off-grid, on-grid and mini grid applications.
- (2) These Regulations do not apply to
- (a) a renewable energy battery sizing;
 - (b) a method of charge; and
 - (c) an energy systems design.

Duties and Requirements

Duty to comply with requirements

3. (1) A person who manufactures, imports, offers for sale, sells, stores, supplies, distributes, donates or disposes of a renewable energy battery for use in the country shall ensure that each model of the renewable energy battery

- (a) is registered with the Commission;
- (b) meets the
 - (i) Standards set out in the First Schedule;
 - (ii) minimum energy performance standards set out in Table 1 under Part One of the Second Schedule;
 - (iii) labelling requirements set out in the Third Schedule; and
 - (iv) the information requirements set out in the Fourth Schedule.

(2) A person who advertises a renewable energy battery shall comply with the provisions of Part Five of the Fourth Schedule.

Prohibition of manufacture, importation, storage, sale, donation, disposal, installation or use of renewable energy battery

4. (1) A person shall not manufacture, import, store, offer for sale, sell, donate, dispose of, install or use a renewable energy battery in the country unless the renewable energy battery

- (a) meets the minimum energy performance standards set out in the Second Schedule and measured in accordance with the Standards;
- (b) meets the requirements of the Standards.

(2) An enforcement authority shall

- (a) detain, re-export or seize and destroy a renewable energy battery imported for use in the country, contrary to subregulation (1); or
- (b) seize a renewable energy battery manufactured in the country contrary to subregulation (1).

Category of renewable energy battery

5. The category of a renewable energy battery shall be determined in accordance with the categories set out in Part Two of the Fourth Schedule.

Minimum energy performance standard of renewable energy battery

6. The minimum energy performance standard of a renewable energy battery shall be determined in accordance with the procedures and standards set out in the Second Schedule.

Base material, technology, voltage and capacity of renewable energy battery

7. The manufacturer of a renewable energy battery shall ensure that the base material, technology, voltage and rated capacity of that renewable energy battery is printed conspicuously and displayed on the renewable energy battery.

Measurement methods

8. The information to be provided pursuant to regulations 10 and 11 shall be obtained by

- (a) a reliable, accurate and reproducible measurement which takes into account recognised state-of-the-art measurements; and
- (b) calculation methods

in accordance with the Standards.

Use of circumvention device

9. (1) A manufacturer, an importer or an authorised representative of the manufacturer shall not use a circumvention device during the conduct of a test of a renewable energy battery.

(2) A manufacturer, an importer or an authorised representative of the manufacturer shall not place on the market a renewable energy battery which is designed to

- (a) detect that the renewable energy battery is being tested by recognising the test conditions or test cycle; or
- (b) react specifically by automatically altering the performance of the renewable energy battery during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative of the manufacturer, in the technical documentation or included in any other documentation provided.

(3) The energy consumption of a renewable energy battery and any of the other declared parameters shall not deteriorate after a

- (a) software; or
- (b) firmware

update, when measured with the same test standard originally used for the declaration of conformity, except with the consent of the Commission and the Standards Authority, before the update.

(4) A manufacturer, an importer or an authorised representative of the manufacturer shall inform the Commission and the Standards Authority in writing, with reasons, prior to an update of the software or firmware.

Technical documentation

10. (1) A person shall not manufacture, import, store, offer for sale, sell, distribute, donate or dispose of a renewable energy battery, unless that person has provided the Commission with sufficient technical documentation to enable the Commission

- (a) ascertain the accuracy of the information contained
 - (i) in the Product Information Sheet; or

- (ii) on the label; and
 - (b) register each model of the renewable energy battery in the Appliance Energy Efficiency Register.
- (2) The technical documentation referred to in subregulation (1) shall
 - (a) be in the English language;
 - (b) include the Product Information Sheet set out in Part One of the Fourth Schedule; and
 - (c) contain the information set out in Part Three of the Fourth Schedule marked "Technical Documentation".
- (3) The technical documentation shall
 - (a) be prepared for each model of a renewable energy battery placed on the market; and
 - (b) include
 - (i) the name and address of the supplier;
 - (ii) the description of the renewable energy battery, for purposes of identification;
 - (iii) the model identifier of the manufacturer;
 - (iv) the relevant drawings on the main design features of the model and parameters of the renewable energy battery that affect the energy storage capacity of the renewable energy battery;
 - (v) reports of relevant measurement tests carried out in compliance with the Standards;
 - (vi) details of calculations, extrapolations and tests carried out to verify the accuracy of calculations;

- (vii) the installation and operating instructions; and
- (viii) the period within which the model of renewable energy battery was manufactured.

Labelling and information requirements

11. (1) A person shall not manufacture, import, store, offer for sale, sell, supply, distribute, donate or dispose of a renewable energy battery for use in the country unless the renewable energy battery and the packaging of the renewable energy battery meet the following requirements:

- (a) the renewable energy battery shall bear a label
 - (i) in the form set out in the Third Schedule; and
 - (ii) placed on the renewable energy battery;
- (b) the information in respect of the renewable energy battery indicated on the packaging of the renewable energy battery shall be in the English language;
- (c) the Product Information Sheet in respect of the renewable energy battery shall be as set out in Part One of the Fourth Schedule;
- (d) the label on the box containing the renewable energy battery shall
 - (i) contain the information set out in the Third Schedule; and
 - (ii) be printed in colour;
- (e) the labels on the renewable energy battery and the packaging of the renewable energy battery shall include the following information:
 - (i) the Quick Response Code;
 - (ii) the name or trade mark of the manufacturer;
 - (iii) the model identifier of the manufacturer;

- (iv) the year of manufacture;
- (v) the type of renewable energy battery by base and technology used;
- (vi) the minimum energy performance standard value of the renewable energy battery, determined in accordance with the test procedures specified in the Standards;
- (vii) the rated capacity and voltage of the renewable energy battery, measured in accordance with the test procedures specified in the Standards;
- (viii) the generic expected cycle lifetime of the renewable energy battery in hours measured in accordance with the test procedures specified in the Standards; and
- (ix) the country of origin of the renewable energy battery;
- (f) the labels on the renewable energy battery shall be printed in colour on a water proof material and pasted conspicuously on the renewable energy battery;
- (g) the background of a label printed or posted on each box containing the renewable energy battery shall be gold in colour; and
- (h) all the stars on the label of the renewable energy battery shall be shaded in black; and
- (i) the text on the label of the renewable energy battery shall be black in colour.

(2) Despite regulation 21, an update to the Standards shall take precedence over the requirements specified in paragraph (e) of subregulation (1) and Part Two of the Second Schedule.

(3) Where

- (a) a side of the packaging is not large enough to contain a label and the blank border; or

- (b) a label would cover more than fifty per cent of the surface area of the largest side of a packaging

the label and the blank border shall be reduced to not less than forty per cent of the largest side of the packaging and posted on the largest side of the packaging.

(4) A person shall not remove the label on the box containing a renewable energy battery or on the packaging containing a renewable energy battery before the first retail purchase of the renewable energy battery.

(5) For the purposes of this regulation, "first retail purchase" means the purchase of a renewable energy battery by the first end user.

Registration of Renewable Energy Batteries

Appliance Energy Efficiency Register

12. (1) The Commission shall establish, keep and maintain an Appliance Energy Efficiency Register.

(2) The Appliance Energy Efficiency Register shall contain the information specified in subregulation (5) of regulation 13.

Application for registration

13. (1) A person who

- (a) manufactures a renewable energy battery in the country; or
- (b) imports a renewable energy battery into the country

shall ensure that each model of the renewable energy battery is registered with the Commission.

(2) A person who

- (a) manufactures a renewable energy battery in the country; or
- (b) imports a renewable energy battery into the country

shall apply to the Commission for registration of the renewable energy battery.

(3) An application for registration under subregulation (2) shall be made in writing or electronically on the website of the Commission.

(4) An application for registration shall be accompanied with a test report from an accredited test laboratory that demonstrates that

- (a) the renewable energy battery meets the minimum energy performance standards set out in the Second Schedule; and
- (b) the test report corresponds with the energy consumption that is provided on the energy efficiency label of the renewable energy battery.

(5) The following information shall be provided for each registration of a model of a renewable energy battery:

- (a) the brand or trademark, if any, used in connection with a supply of the model;
- (b) the model identifier issued by the manufacturer for each model covered by the registration;
- (c) the Product Information Sheet of the model;
- (d) the date the registration takes effect;
- (e) a unique identifier for the registration issued by the Commission;
- (f) the names and contact details of the applicant and contact person in relation to the registration;
- (g) if the model is to be registered as a replacement model of an earlier registered model, that fact and details to identify the replaced model, including the date the replacement was made;

- (h) if a model to be registered is affected by a replacement, that fact and details to identify the replaced model and replacement model, including the date the replacement was made;
- (i) any information specified in these Regulations in relation to that model of renewable energy battery; and
- (j) any other information the Commission may consider appropriate.

Consideration of application

14. (1) The Commission shall, on receipt of an application for registration of a renewable energy battery, consider the application.

(2) The Commission shall in considering the application have regard to the requirements specified in subregulation (5) of regulation 13.

Grant of application

15. (1) The Commission may, within fourteen days after receipt of an application, grant or refuse an application.

(2) Where the Commission decides to grant an application, the Commission shall

- (a) within three days from the date of the decision, inform the applicant, in writing or electronically as the case may be, of the decision; and
- (b) enter the information specified in subregulation (5) of regulation 13 in the Appliance Energy Efficiency Register.

(3) Where the Commission refuses to grant an application, the Commission shall within three days from the date of the decision communicate to the applicant, in writing or electronically as the case may be,

- (a) the reason for the refusal; and
- (b) the applicable Standards the model of the renewable energy battery is required to meet.

Duties of Dealers and Suppliers of Renewable Energy Batteries

Duty of dealer to keep, maintain and provide technical documentation

16. (1) A dealer shall keep and maintain technical documentation in respect of a model of a renewable energy battery for a period of not less than two years from the date of manufacture or importation.

(2) A dealer shall, within two days after a request by an enforcement authority, provide the enforcement authority with technical documentation in respect of a renewable energy battery, for inspection.

(3) Where a dealer fails to provide technical documentation in respect of a renewable energy battery within two days after the request, the enforcement authority may detain the renewable energy battery.

(4) A dealer shall ensure that

- (a) each renewable energy battery, at the point of sale, including at trade fairs, bears the label provided by a supplier in accordance with regulation 3, with the label being displayed conspicuously;
- (b) in the event of distance selling, the label and Product Information Sheet are provided in accordance with the Third and Fourth Schedules;
- (c) an audio advertisement, including radio and local information broadcast network, on a specific model of renewable energy battery, where the brand, size, category or price is mentioned, contains information on the charge efficiency measured at fifty percent and ninety percent State of Charge of the model of renewable energy battery, and the specified minimum energy performance standards of the renewable energy battery;
- (d) a visual advertisement for a specific model of renewable energy battery, including an advertisement on the internet contains the charge efficiency measured at fifty percent and ninety percent State of Charge of the model of renewable energy battery and the minimum energy performance standard available on the label, in accordance with Part Five of the Fourth Schedule.

(e) a technical promotional material concerning a specific model of renewable energy battery, including technical promotional material on the internet, includes

(i) the charge efficiency measured at fifty percent and ninety percent State of Charge of the model of renewable energy battery; and

(ii) the minimum energy performance standards available on the label

in accordance with Part Five of the Fourth Schedule.

Duty of supplier to keep, maintain and provide technical documentation

17. (1) A supplier shall keep and maintain technical documentation in respect of each model of renewable energy battery for a period of not less two years after the date of manufacture or importation.

(2) A supplier shall, on request by an enforcement authority, provide the enforcement authority with the technical documentation of the renewable energy battery for inspection.

(3) Where a supplier fails to provide technical documentation in respect of a renewable energy battery within two days after the request, the enforcement authority may detain the renewable energy battery.

Duty of supplier to keep, maintain and provide Product Information Sheet

18. (1) A supplier shall keep and maintain a Product Information Sheet in respect of each renewable energy battery in the form set out in Part One of the Fourth Schedule.

(2) A supplier shall, on request by an enforcement authority, provide that enforcement authority with a Product Information Sheet which shall be in the

(a) English language; and

(b) form set out in Part One of the Fourth Schedule.

Duty of supplier to provide information for statistical purposes

19. (1) A person who manufactures in the country, imports into the country or exports out of the country a renewable energy battery or an assembly of components that incorporates a renewable energy battery shall provide the Commission with the following information not later than four months after the end of each year:

- (a) the number of renewable energy batteries of each model that the person manufactured, exported or imported into the country in the relevant year;
- (b) the number of renewable energy batteries of each model that the person sold in the country in the relevant year;
- (c) the number of renewable energy batteries of each model that the person exported from the country in the relevant year; and
- (d) the name of each model that the person discontinued
 - (i) manufacturing in the relevant year;
 - (ii) exporting in the relevant year; or
 - (iii) importing in the relevant year; and
- (e) a copy of any existing test report, or other energy performance data specified by the Commission, for each model specified under paragraph (d).

(2) Upon a written request by the Commission, a person who manufactures a renewable energy battery in the country or imports a renewable energy battery into the country shall provide the following information to the Commission not later than forty days after receiving the request:

- (a) the number of renewable energy batteries in each product class specified by the Commission that the person sold to a purchaser in the country in each of the preceding three years; and
- (b) the energy performance characteristics of the renewable energy batteries as specified in the request.

Duty of supplier to ensure accuracy of information

20. (1) A supplier shall ensure that the information indicated on a

- (a) Product Information Sheet; or
- (b) label

in respect of a renewable energy battery that the supplier supplies, is accurate.

(2) The duty imposed on a supplier under subregulation (1) does not affect any other right of action which a person may have by law against a person with respect to the inaccuracy of information on a Product Information Sheet or on a label.

Access to information on technical documentation and Product Information Sheet

21. (1) The information required under regulations 10, 11, 16, 17 and 18 shall be obtained in accordance with the test procedures required by the Standards.

(2) Information obtained in a manner other than in accordance with subregulation (1) shall, for the purposes of these Regulations, be invalid.

Product brochure in respect of renewable energy battery

22. Where a supplier provides a product brochure in respect of a renewable energy battery, the brochure shall contain a Product Information Sheet which shall be in the

- (a) English language; and
- (b) form set out in Part One of the Fourth Schedule.

Information

Public information

23. (1) The information provided by a supplier on the Product Information Sheet or on a label of a renewable energy battery is deemed public information.

(2) A supplier is deemed to have consented to the publication of the information indicated on a Product Information Sheet or label in respect of a renewable energy battery that the supplier deals in.

Information in respect of mail order and other distance selling

24. (1) Where a person offers a renewable energy battery for sale to another person in the country through a medium of communication including a mail order or any other distance selling medium, that person shall provide information in respect of the renewable energy battery.

- (2) The information referred to in subregulation (1) shall
- (a) be in the English language;

- (b) include the product registration number assigned by the Commission upon registration in the Appliance Energy Efficiency Register;
- (c) in the case of an advertisement for a specific renewable energy battery model, contain the minimum energy performance standard, if the advertisement discloses energy-related or price information;
- (d) include the information set out in Part Four of the Fourth Schedule; and
- (e) be written in a manner that is legible.

Obligations of audio or audio-visual broadcasting service provider

25. Where an audio or audio-visual broadcasting service provider advertises a renewable energy battery, and the information in the advertisement includes the brand, model, size, price and any other information that is specific to a particular model, that service provider shall ensure that

- (a) the advertisement has been vetted and approved by the Commission;
- (b) the advertisement includes
 - (i) information on the minimum energy performance standard of the renewable energy battery;
 - (ii) a statement that the advertisement has been vetted and approved by the Commission;
 - (iii) any other information required under Part Five of the Fourth Schedule.

Obligations of e-commerce platform

26. (1) A person shall not offer for sale, sell, supply, distribute or dispose of a renewable energy battery through a promotion on the internet unless

- (a) the minimum energy performance of the renewable energy battery is posted next to the price of the renewable energy battery; and

- (b) the label is made available to consumers in the same medium of communication.

(2) Where an e-commerce service provider allows the direct sale of a renewable energy battery through the website of the service provider, the service provider shall

- (a) enable the display of the
 - (i) electronic label; and
 - (ii) electronic Product Information Sheet

provided by the dealer on the display mechanism in accordance with Part Six of the Fourth Schedule; and

- (b) inform the dealer of the obligation to display the electronic label and electronic Product Information Sheet.

Misleading information

27. (1) A person shall not display a label, mark, symbol or inscription which relates to the energy consumption of a renewable energy battery if the display is likely to be

- (a) deceptive;
- (b) misleading; or
- (c) false.

(2) A person shall not broadcast an advertisement relating to the energy performance of a renewable energy battery if the information in the advertisement is likely to be

- (a) deceptive;
- (b) misleading; or
- (c) false.

(3) Subregulations (1) and (2) do not apply to

- (a) a label;
- (b) a mark;
- (c) a symbol; or
- (d) an inscription

displayed under an environmental labelling scheme or an endorsement labelling scheme.

Restriction on disclosure of information

28. (1) An enforcement authority shall not disclose information which consists of a

- (a) secret manufacturing process; or
- (b) trade secret

that was obtained by that enforcement authority in the course of the exercise of a power or duty conferred on the enforcement authority by these Regulations.

(2) Despite subregulation (1), an enforcement authority may disclose information if

- (a) the information is public information; or
- (b) the disclosure is made
 - (i) for the purpose of facilitating the exercise of power by an enforcement authority under these Regulations or any other enactment;
 - (ii) in connection with the investigation of an offence; or
 - (iii) for the purpose of a civil or criminal proceeding.

Powers of Enforcement

Power of enforcement authority to require technical documentation

29. Where an enforcement authority suspects that the information given

- (a) in a Product Information Sheet; or
- (b) on a label

in respect of a renewable energy battery is incorrect, that enforcement authority may, by notice served on the supplier or importer of the renewable energy battery, require the supplier or importer to furnish the enforcement authority with the technical documentation referred to in regulation 10 within the period stipulated in the notice.

Power of enforcement authority to inspect renewable energy battery

30. An enforcement authority may, at any reasonable time, enter any premises to inspect a renewable energy battery if the enforcement authority has reason to believe that the premises are being used for a purpose in contravention of these Regulations.

Power of enforcement authority to detain or seize renewable energy battery or record

31. (1) Subject to these Regulations, where an enforcement authority has reasonable cause to suspect that an offence has been committed or is being committed, that enforcement authority may

- (a) at any reasonable time enter premises other than a dwelling place, and conduct an inspection in accordance with subsection (3) of section 52 of the Act;
- (b) require a person engaged in a business or employed in connection with a business to produce a record in respect of a renewable energy battery;
- (c) detain or seize a renewable energy battery that is
 - (i) not labelled;
 - (ii) not properly labelled; or
 - (iii) labelled in a deceptive or misleading manner;
- (d) detain or seize a renewable energy battery that is imported without

technical documentation which justifies the label affixed on the renewable energy battery;

- (e) detain or seize a renewable energy battery to enable tests to be carried out;
- (f) seize or detain a record to be used as evidence in proceedings in respect of an offence under these Regulations;
- (g) cause a container to be opened for the purpose of inspection;
- (h) break open a container, where implementation of paragraph (g) is not practicable; and
- (i) detain or seize a renewable energy battery if the model is not registered in the Appliance Energy Efficiency Register.

(2) For the purposes of paragraphs (b) and (f) of subregulation (1), the enforcement authority may request for information stored electronically, to be made available to the enforcement authority in printed form.

Power of enforcement authority to test renewable energy battery

32. (1) An enforcement authority may

- (a) obtain, remove and test a renewable energy battery; or
- (b) order the testing of a renewable energy battery

to ascertain whether a provision of these Regulations has been contravened.

(2) A person who suspects that a renewable energy battery offered for sale does not comply with the provisions of these Regulations may lodge a complaint with an enforcement authority.

(3) The enforcement authority may, upon receipt of a complaint under subregulation (2), detain and test the renewable energy battery.

(4) The test to be conducted in respect of a renewable energy battery purchased, obtained or detained under regulation 31 shall be carried out in accordance with the test procedures required by the Standards.

Detention, Re-Exportation and Seizure

Procedure for market surveillance and verification

33. (1) Despite regulation 32, the Commission and the Standards Authority shall conduct market surveillance to ascertain whether a renewable energy battery on the market conforms to these Regulations.

(2) The Commission and the Standards Authority shall apply the verification procedure specified in the Fifth Schedule to conduct the market surveillance.

Order to access premises to inspect, detain or seize renewable energy battery or record

34. (1) Where

- (a) an enforcement authority is refused entry to premises;
- (b) a notification to enter premises would defeat the purpose of the entry;
- (c) the premises to be entered are unoccupied; or
- (d) the occupier of premises to be entered is temporarily absent;

the enforcement authority may apply to a court for an order to enter the premises to inspect, detain or seize a renewable energy battery if the enforcement authority has reasonable grounds to believe that a renewable energy battery or record on the premises may assist in the disclosure of evidence of the commission of an offence under these Regulations.

Procedure for detention of renewable energy battery

35. (1) An enforcement authority that exercises a power of detention under regulation 31 shall immediately give a written notice to the person against whom the power has been exercised.

(2) The written notice shall state

- (a) the renewable energy battery that has been detained; and
- (b) the reason for the detention.

(3) Where an enforcement authority detains a renewable energy battery, that renewable energy battery may be kept in a warehouse or other secure location reserved for the purpose.

Procedure for re-labelling of detained renewable energy battery

36. (1) Subject to these Regulations, where an enforcement authority detains a renewable energy battery under paragraph (e) of subregulation (1) of regulation 31, the enforcement authority shall

- (a) within two days of the detention, submit a sample of the renewable energy battery for testing; and
- (b) within two days of receipt of the test results, give notice in writing to the supplier of the renewable energy battery to properly label the renewable energy battery if the minimum energy performance standards have been complied with.

(2) The notice under paragraph (b) of subregulation (1) shall require a renewable energy battery to be re-labelled in the required manner or exported out of the country within twenty-eight days.

(3) Where a supplier is required under subregulation (2) to re-label a renewable energy battery, the supplier shall re-label the renewable energy battery under the supervision of an officer authorised for the purpose by the Commission or the Standards Authority.

(4) Where a supplier fails to

- (a) re-label the renewable energy battery; or
- (b) export the renewable energy battery

within twenty-eight days of the notice given under paragraph (b) of subregulation (1), the Commission shall, in consultation with the Standards Authority, destroy the renewable energy battery in a manner that the Commission may determine.

Procedure for re-exportation of imported renewable energy battery

37. (1) An enforcement authority that exercises a power of detention or seizure under subregulation (1) of regulation 31 shall, within seven days of the detention or seizure, give an order in writing to the person against whom the power has been exercised to re-export the renewable energy battery.

(2) The order referred to in subregulation (1) shall state

- (a) the renewable energy battery to be re-exported;
- (b) the reason for the order;
- (c) the period within which the renewable energy battery is to be re-exported;
and
- (d) the fact that the supplier shall be responsible for the cost associated with the re-export.

(3) The owner of the renewable energy battery may be required to pay a deposit to cover the cost of re-exportation, if the renewable energy battery does not meet the minimum energy performance standards under these Regulations.

(4) Where a renewable energy battery is kept within premises that are under the control of the owner of the renewable energy battery, the owner shall pay a security deposit against any breach of the re-exportation order.

(5) A security deposit under subregulation (4) shall be forfeited in the event of a breach of the re-exportation order, including the sale or destruction of a renewable energy battery which has been ordered to be re-exported.

Procedure for seizure of renewable energy battery

38. (1) An enforcement authority that exercises a power of seizure under regulation 31 shall, within seven days of the seizure, give a written notice to the person against whom the power has been exercised.

(2) The written notice shall state

- (a) the renewable energy battery that has been seized;
- (b) the reason for the seizure; and
- (c) the venue and the period within which a petition against the seizure may be brought under regulation 39.

(3) Where an enforcement authority seizes a renewable energy battery, that renewable energy battery may be kept in a warehouse or other secure location reserved for the purpose.

(4) The owner of the renewable energy battery may be required to pay a deposit to cover the cost of destruction, if the renewable energy battery does not meet the minimum energy performance standards.

(5) Where a renewable energy battery is kept within premises that are under the control of the owner of the renewable energy battery, the owner shall pay a security deposit against any breach of the seizure order.

(6) A security deposit under subregulation (5) shall be forfeited in the event of a breach of the seizure order, including the sale or destruction of a renewable energy battery which has been seized.

Petition and Compensation

Petition against seizure

39. (1) Subject to these Regulations, a person whose renewable energy battery is seized may, within seven days after receipt of the written notice specified in subregulation (1) of regulation 38, petition the Executive Secretary for the release of the seized renewable energy battery.

(2) The Executive Secretary shall, within seven days of the receipt of a petition under subregulation (1),

- (a) confirm the seizure; or
- (b) order the release of the seized renewable energy battery to the petitioner on a specific day.

(3) A person who is dissatisfied with a decision of the Executive Secretary under subregulation (2) may lodge a complaint with the Board within seven days of the receipt of the decision.

(4) The Board shall within thirty days of the receipt of a complaint under subregulation (3)

- (a) consult the Standards Authority; and
- (b) take a decision on the complaint.

(5) The Board may release the seized renewable energy battery to the petitioner only if the Commission and the Standards Authority fail to prove that an offence under these Regulations has been committed.

(6) A person who is dissatisfied with

- (a) a decision of the Board under subregulation (4) may, within fourteen days of the decision, or
- (b) the failure of the Board to make a decision within thirty days after receipt of the complaint may, within fourteen days of the failure

apply to the court.

Forfeiture and destruction of seized renewable energy battery

40. (1) Where an appeal to the Board under subregulation (3) of regulation 39 is not successful, the enforcement authority shall, within twenty-eight days of the decision of the Board, notify the owner of the renewable energy battery of the forfeiture and date of destruction of the seized renewable energy battery.

(2) The Commission may, in consultation with the Standards Authority, destroy a forfeited renewable energy battery in a manner that the Commission may determine.

(3) Where under subregulation (6) of regulation 39, the court upholds or affirms the decision of the Board to forfeit and destroy the renewable energy battery, the Commission shall destroy the renewable energy battery within the period given by the court.

Compensation for loss of renewable energy battery or record seized

41. (1) Where an enforcement authority exercises power under these Regulations to seize a renewable energy battery or record, that enforcement authority is liable to pay compensation to the owner of the renewable energy battery or record for any loss or damage caused by the exercise of the power, if

- (a) these Regulations have not been contravened in relation to the renewable energy battery or record; and
- (b) the loss or damage is not attributable to the neglect or the fault of the owner but an official of the Commission.

(2) Paragraph (b) of subregulation (1) does not apply in a case of *force majeure*.

(3) A dispute as to the

(a) right to compensation; or

(b) amount of compensation payable to a person under subregulation (1),

shall be determined in the first instance by arbitration in accordance with the Alternative Dispute Resolution Act, 2010 (Act 798).

Recovery of expenses by enforcement authority

42. (1) Where an enforcement authority

(a) seizes,

(b) tests, or

(c) supervises the re-labelling or destruction of

a renewable energy battery, that enforcement authority may surcharge the dealer or supplier of the renewable energy battery for the expenses incurred for the seizure or supervision.

(2) Despite subregulation (1), where a court convicts a person of an offence in respect of the contravention of a provision of these Regulations, the court may, in addition to any order that the court may make as to costs and expenses, order the person convicted to reimburse the enforcement authority for the expenditure incurred by the enforcement authority in connection with the seizure.

Miscellaneous Provisions

Offences and penalties

43. (1) A person who

(a) manufactures, imports, stores, offers for sale, sells, advertises, distributes or disposes of a renewable energy battery that

(i) does not meet a requirement in respect of the minimum energy performance standards contrary to regulation 3;

- (ii) is not accompanied by the required technical documentation contrary to regulation 10;
 - (iii) is not labelled or properly labelled contrary to regulation 11;
 - (iv) is labelled in a deceptive or misleading manner contrary to regulation 27;
- (b) uses a circumvention device contrary to regulation 9;
 - (c) fails to comply with a labelling requirement contrary to regulation 11;
 - (d) fails to provide technical documentation contrary to regulations 10, 16 and 17;
 - (e) fails to register a renewable energy battery contrary to regulation 13;
 - (f) fails to provide a Product Information Sheet contrary to regulation 18;
 - (g) fails to provide information on a renewable energy battery contrary to regulation 19;
 - (h) provides inaccurate information contrary to regulation 20;
 - (i) advertises a renewable energy battery without providing accurate information on the minimum energy performance standard of the available, contrary to regulation 25;
 - (j) offers for sale or sells a renewable energy battery over the internet or other distance selling medium contrary to regulation 24 or 26;
 - (k) provides misleading information contrary to regulation 27;
 - (l) obstructs or interferes with an enforcement authority in the exercise of the powers of that enforcement authority contrary to regulation 31;
 - (m) fails to comply with a re-labelling requirement contrary to regulation 36; or
 - (n) violates a seizure order or notice contrary to regulation 38;

commits an offence and is liable on summary conviction to a fine of not less than one hundred and twenty-five penalty units and not more than two hundred and fifty penalty units or to a term of imprisonment of not less than six months and not more than twelve months or to both.

(2) A person who commits a second or subsequent offence under subregulation (1) after an earlier conviction under subregulation (1) is liable on summary conviction to a fine of not less than two hundred and fifty penalty units and not more than five hundred penalty units or to a term of imprisonment of not less than twelve months and not more than twenty-four months or to both.

(3) Where an offence is committed under these Regulations by a body corporate, member of a partnership or a firm, every director, officer of the body corporate, member of the partnership or any other person concerned with the management of the firm shall be deemed to have committed that offence and is liable, on summary conviction, to a fine of not less than five hundred penalty units and not more than one thousand penalty units, and is in addition liable to the payment of compensation for the damage resulting from the breach.

(4) A person shall not be convicted of an offence under subregulation (3), if it is proved that

- (a) the person exercised due diligence to secure compliance with the provisions of these Regulations, and
- (b) the offence was committed without the knowledge, consent or connivance of that person.

Interpretation

44. In these Regulations, unless the context otherwise requires,

“accredited test laboratory” means a test laboratory that is recognised by the Standards Authority for laboratory testing and product certification;

“appliance” means a device or machine for performing a specific task;

“Appliance Energy Efficiency Register” means an official record, kept and maintained by the Commission in respect of energy efficiency information on

models of electrical appliances that have been certified by the Commission and Standards Authority for use in Ghana;

“audio or audio-visual broadcasting service provider” means a person who provides a service which delivers radio programmes or programmes with hearing and sight components to persons having equipment appropriate for receiving that service, whether the delivery is effected by means of or uses the radiofrequency spectrum, cable, optical fibre, satellite, internet radio via streaming media on the internet, or any other means or a combination of those means intended to reach a wide audience;

“battery” means a device converting solar radiation into electricity;

“capacity” means the maximum amount of energy that can be extracted from a renewable energy battery measured in ampere-hours under a test condition specified by the standards;

“container” means a receptacle or enclosure for holding a product for storage, packaging and shipping;

“court” means court of competent jurisdiction;

“cycle lifetime” means the service life in years of a renewable energy battery equal to the number of cycles delivered before the renewable energy battery’s capacity drops below 80% of its rated capacity;

“dealer” means a retailer or other person who displays, offers for sale or sells a renewable energy battery to an end user;

“distance selling” means the sale of goods or services without the buyer or seller being physically present simultaneously;

“electronic Product Information Sheet” means a document containing the contents of the Product Information Sheet in electronic format;

“end user” means the final user of a renewable energy battery;

“endorsement labelling scheme” includes a voluntary labelling scheme that guarantees renewable energy battery performance standards, that is equal to or exceeds the minimum threshold established by a recognised advisory body;

“energy efficiency” means the ratio of the quantity of electricity measured in ampere-hours or kilowatt hours delivered during the discharge of a renewable energy battery and the quantity of electricity measured in ampere-hours or kilowatt hours necessary to restore the initial state of charge for a set of rating conditions specified in the Standards;

“enforcement authority” means

- (a) an authorised officer of the Energy Commission;
- (b) an authorised officer of the Standards Authority;
- (c) an authorised officer of the Customs Division of the Ghana Revenue Authority,
- (d) any other authorised person designated by the Customs Division of the Ghana Revenue Authority, the Energy Commission or the Standards Authority to carry out inspections for the purposes of these Regulations; or
- (e) an authorised officer of the Police Service;

“environmental labelling scheme” means a voluntary labelling scheme that provides detailed information on the environment in respect of the performance characteristics of a renewable energy battery;

“equivalent model” means a model which has the same technical characteristics relevant for the technical information to be provided, but which is placed on the market or put into service by the same manufacturer, importer or authorised representative as another model with a different model identifier’;

“*force majeure*” means.....

“GS” means Ghana Standards;

“importer” means a person who places a renewable energy battery from a foreign country on the Ghanaian market and supplies that renewable energy battery for use;

“label” means a label of a renewable energy battery which contains information on the energy consumption of the renewable energy battery;

- “minimum energy performance standards” mean a set of procedures and regulations that prescribe the minimum allowable values of energy efficiency or energy performance of manufactured products;
- “model identifier” means the code, usually alphanumeric, which distinguishes a specific product model from other models with the same trademark or the same name of the manufacturer, importer or authorised representative;
- “point of sale” means the place at which a retail transaction is carried out;
- “premises” means land and any building, store, shop, apartment, or other structure on the land used for the storage of a battery;
- “product brochure” includes a pamphlet or booklet that contains introductory information about a product;
- “Product Information Sheet” means a standard table of information related to a renewable energy battery;
- “Quick Response Code” means a matrix barcode included on the energy label of a product model that links to the information of the model in the public part of the product database;
- “rated voltage” means the voltage marked on a battery in volts;
- “record” includes a book, document, label, mark, symbol, inscription and information in non-documentary form;
- “renewable energy battery” means a device that reserves energy for later consumption that is charged by a connected renewable energy system;
- “sale” means the exchange of the product for consideration and includes hire purchase, credit sale and purchase by instalment;
- “Standards” means quality specifications for renewable energy battery as stipulated in the First Schedule;
- “Standards Authority” means the Standards Authority established under the Standards Authority Act, 1973 (N.R.C.D. 173);
- “supplier” includes

- (a) a manufacturer or the authorised representative of a manufacturer resident in the country; and
- (b) an importer or the person who introduces a renewable energy battery on the domestic market;

“supply” includes an offer to supply, contract to supply and advertisement for the supply of a renewable energy battery but excludes the exhibition at a trade fair of a renewable energy battery that is prohibited by these Regulations; and

“year” means the period from 1st January to 31st December.

Transitional provisions

45. A person who, before the coming into force of these Regulations, has

- (a) manufactured in the country; or
- (b) imported into the country

a renewable energy battery that does not comply with these Regulations, shall, within one year after the coming into force of these Regulations, sell, distribute, donate or dispose of that renewable energy battery.

SCHEDULES

FIRST SCHEDULE

(regulations 1(a)(i), 3(1)(b)(i) and 45)

APPLICABLE STANDARDS

1. GS IEC 61427-1:2013 – Secondary cells and batteries for renewable energy storage – General requirements and methods of test – Part 1: Photovoltaic off-grid applications.
2. GS IEC 61427-2:2015 – Secondary cells and batteries for renewable energy storage – General requirements and methods of test – Part 2: Photovoltaic on-grid applications.
3. GS IEC 61056 – 1: 2005 General purpose lead-acid batteries (valve-regulated types) – Part 1: General requirements, functional characteristics – Methods of test.
4. GS IEC 61951– 1: 2012 Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable Sealed rechargeable single cells – Part 1: Nickel-Cadmium.
5. GS IEC 61951– 2: 2012 Secondary cells and batteries containing alkaline or other non-acid electrolytes – Portable Sealed rechargeable single cells – Part 2: Nickel-Metal Halide (NiMH).
6. GS IEC 61960– 3: 2005 Secondary cells and batteries containing alkaline or other non-acid electrolytes – Secondary Lithium cells and batteries for portable applications.
7. GS IEC 60896-11, Stationary lead-acid batteries – Part 11: Vented types – General requirements and methods of test.
8. GS IEC 60896-21, Stationary lead-acid batteries – Part 21: Valve regulated types – Methods of test

SECOND SCHEDULE

(regulations 1(a)(i), 1(b), 3(1)(b)(ii), 4(1)(a), 6, 11(2) and 14(4)(a))

MINIMUM ENERGY PERFORMANCE STANDARDS

PART ONE

(regulations 1(a)(i), 3(1)(b)(ii) and 4(1)(a))

Energy Efficiency

1. The energy efficiency of a renewable energy battery under these Regulations is measured by the charge efficiency of the renewable energy battery defined as the ratio of the quantity of electricity delivered in ampere-hours during the discharge of a renewable energy battery and the quantity of electricity in ampere-hours necessary to restore the initial State of Charge under specific conditions.

The battery charge efficiency parameter is dependent largely on the State of Charge of the renewable energy battery. State of Charge of a renewable energy battery is defined as the percentage of the renewable energy battery capacity available for discharge. Other relevant parameters for determination of the adequate performance of a renewable energy battery include

- (a) rated capacity;
- (b) endurance in cycling;
- (c) charge retention during storage; and
- (d) endurance in extreme conditions for PV applications.

In order to establish an acceptable technical basis for performance comparisons between various types and brands of renewable energy batteries under these Regulations, test methods and measurements under standardised test conditions specified in the applicable Standards specified in the First Schedule are to be used.

The energy efficiency performance specification and rating thresholds of a renewable energy battery have to be determined taking into consideration the variation of energy efficiency at different state of charge levels of the renewable energy battery. For this purpose, a two-tier performance rating system has been adopted made up of a minimum energy efficiency performance specification in addition to a 7-star energy efficiency rating classification of renewable energy batteries.

Minimum Energy Performance Standard

2. The minimum energy performance standard of a renewable energy battery under these Regulations shall be a Charge Efficiency of ninety-five percent measured at the renewable energy battery's *State of Charge of fifty percent* ($\eta_{SoC=50\%}$) and a Charge Efficiency of eighty six percent measured at a renewable energy battery's *State of Charge of ninety percent* ($\eta_{SoC=90\%}$), in accordance with the test methods and ambient test conditions specified by the Standards.

Table 1: Minimum Energy Performance Standard (MEPS) of Renewable Energy Battery

Description of Criterion	Charge Efficiency @- $\eta_{SoC=50\%}$ (in percent)	Charge Efficiency @ $\eta_{SoC=90\%}$ (in percent)
MEPS	95%	86%

* The required minimum efficiency of a renewable energy battery imported or manufactured in Ghana shall meet a minimum charge efficiency of ninety-five percent measured at State of Charge=fifty percent and a ninety-five percent charge efficiency measured at State of Charge=fifty percent. The renewable energy battery under these Regulations shall be compliant with the test methods and measurement procedures and test conditions required by the specified Standards.

PART TWO

(regulation 11(2))

Evaluation of Energy Efficiency ($\eta_{SoC=x\%}$)

Charge Efficiency, $\eta_{SoC=x\%}$, which is the measure of energy efficiency of a renewable energy battery, measured at a specific State of Charge (SoC=x%), under these Regulations is calculated using the following formula expressed in percentages

$$\eta_{SoC=x\%} = \frac{AH_{output}}{AH_{input}} \times 100 (\%)$$

Where

$\eta_{\text{SoC}=x\%}$ is the Renewable Energy Battery Charge Efficiency measured at initial State of Charge (SoC=x%)

AH_{output} is the quantity of electricity delivered during discharge from an initial State of Charge (SoC=x%) expressed in ampere-hour (Ah)

AH_{input} is the quantity of electricity needed for restoration to initial State of Charge (SoC=x%) expressed in ampere-hour (Ah)

The **initial State of Charge (SoC=x%)** conditions relevant for the calculations under these Regulations are the

- (a) SoC=fifty percent for the minimum energy performance determination; and
- (b) SoC=ninety percent for the star rating classification.

Where renewable energy battery auxiliary sub-systems, such as the renewable energy battery management system (BMS) or renewable energy battery support system (BSS), are required for on-grid PV systems, consumption of the subsystems are factored into the Charge Efficiency calculations by modifying the ampere-hour output and ampere-hour input formulae as follows:

$$AH_{\text{output}} = AH_{\text{discharge}} - AH_{\text{aux, discharge}}$$

$$AH_{\text{input}} = AH_{\text{charge}} + AH_{\text{aux, charge}}$$

Where

$AH_{\text{discharge}}$ is the quantity of electricity delivered during discharge from an initial State of Charge (SoC=x percent) expressed in ampere-hour (Ah)

$AH_{\text{aux, discharge}}$ is the quantity of electricity used by the renewable energy battery sub-systems during battery discharge expressed in ampere-hour (Ah)


AH_{charge} is the quantity of electricity needed for restoration to initial State of Charge (SoC=x percent) expressed in ampere-hour (Ah)

$AH_{\text{aux, charge}}$ is the quantity of electricity used by the renewable energy battery sub-systems during battery charging period expressed in ampere-hour (Ah)

THIRD SCHEDULE

(regulations 3(1)(b)(iii), 4(1)(b), 11(1)(a)(i) and 11(1)(d)(i) and 16(4(b))



THE LABEL



MINIMUM ENERGY PERFORMANCE STANDARD (MEPS)
 $\eta_{soc} @ 50\% \geq 95\%$
 $\eta_{soc} @ 90\% \geq 86\%$

Charge Efficiency for this Battery Model is:
 $\eta_{soc} @ 50\% = XXX\%$
 $\eta_{soc} @ 90\% = YYY\%$

Battery Type:	XXXXXX
Model/Year:	XXXX/YYYY
Supplier's Name or Trade Mark:	XXXX
Country of Origin:	XXXX
Rated Capacity:	xxx Amp hr
Rated Voltage:	xxx, Volts
Cycle Lifetime:	xxx
PV Application Endurance Lifetime:	xxx
Charge Retention During Storage:	xxxx



When tested in accordance with BIS IEC 61427, 61056, 61951, 61960 and 60896 efficiency will depend on how the appliance is used.
Further information is contained in the Product Information Sheet.
Removal of the label before First Purchase is an offence under the Law.

Figure 1: Label of Renewable Energy Battery

Notes to Figure 1

2. The following notes define the information to be included on the label:

- (a) Quick Response Code
- (b) Renewable energy battery Type: (XXX)
- (c) Model/Year:
- (d) Name of supplier or trademark
- (e) Country of origin
- (f) Rated charge efficiency at 90%-SoC (marked "%")
- (g) Rated charge efficiency at 50%-SoC
- (h) Rated Capacity – C_x (marked "Ah" or "amp-hr")
- (i) Rated voltage (marked "V" or "Volts")
- (j) Generic expected cycle lifetime x
- (k) Renewable energy battery cycle lifetime
- (l) Charge retention during storage

3. Printing

- (1) Figure 2 defines aspects of the label.
- (2) The dimensions of the label shall be in accordance with the illustration in figure 2 and shall be placed on the side or container of the regulated appliance.
- (3) Colours are to be used on the label in accordance with the following:
 - (a) all text is in black or gold as illustrated;
 - (b) the background is gold; and
 - (c) border line shall be in black.

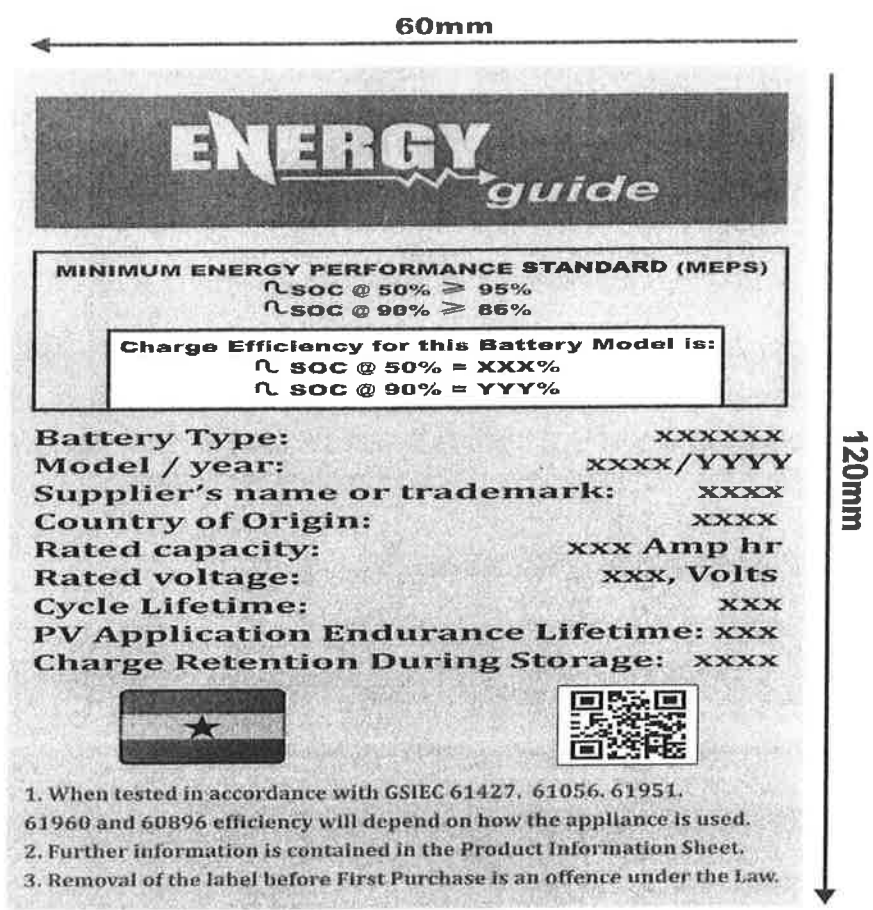


Figure 2: Label dimensions

FOURTH SCHEDULE

(regulations 3(1)(b)(iv), 3(2), 4(1)(b), 5, 10(2)(b) and (c), 11(1)(c), 17(4)(b),(c),(d) and (e), 18(1), 18(2)(b), 22(b), 24(2)(d), 25(b)(iii) and 26(2)(a))

PART ONE

(regulations 10(2)(b), 11(1)(c), 18(1), 18(2)(b) and 22(b))

Product Information Sheet

The Product Information Sheet shall contain information as specified below. The information may be given in the form of a table covering a number and type of renewable energy batteries supplied by the same supplier, in which case it shall be given in the order specified, or given in the description of the renewable energy battery.

- (a) Name of supplier or trademark
- (b) Model identifier of supplier
- (c) Type or category of renewable energy battery
- (d) Charge efficiency measurements of the battery
- (e) Harmonised standards and other technical specifications applied, where appropriate
- (f) Technical parameters, standards and test methods used for measurements, test results obtained and used for determining the renewable energy battery energy efficiency performance rating
- (g) User instructions including guidance on
 - (i) transportation
 - (ii) storage
 - (iii) installation
 - (iv) commissioning
 - (v) operation and maintenance
 - (vi) decommissioning
 - (vii) precautions for initial charging (if any) and
 - (viii) disposal instructions.

PART TWO
(regulation 5)

Type/Category of Renewable Energy Battery

Table 1: Renewable Energy Battery Type/Category

Type	Category	
Lead acid	Deep cycle	
	VRLA	AGM Gel
Lithium-ion	Lithium cobalt oxide (ICR) Magnese oxide (BR) Lithium-ion polymer Phosphate Sulfur Titanate Thin-film Lithium-ion Lithium Ceramic	
Nickel cadmium	Vented cell type Other	
Nickel Metal Halide	Low self-discharge NiMH Other	

PART THREE
(regulation 10(2)(c))

Technical documentation

The technical documentation referred to in regulation 10 shall include at least all the information required under Part One and Part Two of this Schedule in addition to the items shown in Table 2:

Table 2: Technical Documentation

Description of parameter	Symbol/Units	Value of parameter
i. Renewable energy battery type and technology		As specified in Part Two
ii. Rated capacity	C_x/Ah	

iii. Rated current	-/Amps			
iv. Rated battery voltage	V/Volts			
v. Efficiency star rating	x-star			
vi. Rated Charge Efficiency at 90%-SoC	$\eta_{SoC=90\%} / \%$			
vii. Rated charge efficiency at 50%-SOC (MEPS)	$\eta_{SoC=50\%} / \%$			
viii. BMS/BSS consumption during charging and discharge at SoC=x% (if applicable)	-/Ah	@ SoC =	BMS	BSS
		50%		
		90%		
ix. Charge retention rate				
x. Generic endurance cycle lifetime at operating temperature 40°C				
xi. Recommended temperature range for efficient performance				
xii. Standards and test methods used for measurements				

PART FOUR
(regulation 24(2)(d))

Mail Order and Other Distance Selling

1. Mail order catalogues and other communication shall contain at least, the following information, given in the order specified below:
 - (a) rated capacity (C_{120}) of the battery model measured in ampere-hours and provided in accordance with Part Three of the Fourth Schedule;
 - (b) rated energy efficiency measured at ninety percent of State of Charge in accordance with Part Two of the Fourth Schedule (energy consumption);
 - (c) rated charge efficiency measured at fifty percent of State of Charge in accordance with Part Three of the Fourth Schedule (energy consumption);
 - (d) type/category of renewable energy battery;
 - (e) recommended application for the renewable energy battery model.

2. The size and font, in which all the information referred to in paragraph 1 is printed, shall be legible.

PART FIVE

(regulations 3(2), 17(4)(c), (d) and (e) and 25(b)(iii))

Information to be provided in audio advertisements, visual advertisements, in technical promotional material, in distance selling, except distance selling on the internet

1. In an audio advertisement, for the purposes of ensuring conformity with the requirements laid down in subregulation (2) of regulation 3, the charge efficiency measured at fifty percent and ninety percent State of Charge of the model of the appliance being advertised shall be compared with the specified minimum energy performance standards and shall be stated in the advertisement.
2. In a visual advertisement, for the purposes of ensuring conformity with the requirements laid down in subregulation (2) of regulation 3, the charge efficiency measured at fifty percent and ninety percent State of Charge of the model and the minimum energy performance standards of the renewable energy battery shall be made available on the label and be shown as set out in paragraph 5 of this Part.
3. In technical promotional material, for the purposes of ensuring conformity with the requirements laid down in subregulation (2) of regulation 3, the charge efficiency measured at fifty percent and ninety percent State of Charge of the model and its minimum energy performance standards available on the label shall be shown as set out in paragraph 5 of this Part.
4. Any paper-based distance selling must show the energy performance characteristics of the model and the ranges of energy performance characteristics available on the label as set out in paragraph 5 of this Part.
5. The charge efficiency measured at fifty percent and ninety percent State of Charge of the model and its minimum energy performance standards shall be shown, as indicated in Figure 1, with:

- (a) an arrow, containing the charge efficiency measured at fifty percent and ninety percent State of Charge in hundred percent white, Calibri Bold and in a font size at least equivalent to that of the price, when the price is shown;
 - (b) the colour of the box shall be gold;
 - (c) the minimum energy performance standards in hundred percent black; and,
 - (d) the size shall be such that the box is clearly visible and legible.
6. By way of derogation, if the visual advertisement, technical promotional material or paper-based distance selling is printed in monochrome, the box can be in monochrome in that visual advertisement, technical promotional material or paper-based distance selling.

ENERGY PERFORMANCE STANDARD			
HIGHEST ENERGY PERFORMANCE	↑	$\eta_{50\%}$	$\eta_{90\%}$
		X1X1,	Y1Y1,%
THIS MODEL'S PERFORMANCE		XX, %	YY,%
LOWEST ENERGY PERFORMANCE		95%	86%

Figure 1: Coloured Charge Efficiency at 50% and 90% SoC and MEPS

7. Telemarketing-based distance selling must specifically inform the customer of the charge efficiency measured at fifty percent and ninety percent State of Charge of the model and minimum energy performance standards available on the label, and that the customer can access the full label and the product information sheet through a free access website, (public part of the Commission's Appliance Energy Efficiency Register) or by requesting a printed copy.
8. For all the situations mentioned in paragraphs 2 to 4 and 7, it must be possible for the customer to obtain, on request, a printed copy of the label and the product information sheet.

PART SIX
(regulation 26(2)(a))

Information to be provided in the case of distance selling through the Internet

1. The appropriate label made available by suppliers in accordance with the Third Schedule shall be shown on the display mechanism in proximity to the price of the product.
2. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in the Third Schedule.
3. The label may be displayed using a nested display, in which case the image used for accessing the label shall comply with the specifications laid down in paragraph 5 of this Part.
4. If nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.
5. The image used for accessing the label in the case of nested display, as indicated in Figure 2, shall:
 - (a) indicate the charge efficiency measured at fifty percent and ninety percent State of Charge of the product in the box in hundred percent black, Calibri Bold and in a font size equivalent to that of the price;
 - (b) have the minimum energy performance standard in hundred percent black;


ENERGY PERFORMANCE STANDARD			
HIGHEST ENERGY PERFORMANCE		$\eta_{50\%}$	$\eta_{90\%}$
		X1X1,	Y1Y1,%
THIS MODEL'S PERFORMANCE		XX, %	YY,%
LOWEST ENERGY PERFORMANCE		95%	86%

Figure 2: Coloured Charge Efficiency at 50% and 90% SoC and MEPS

6. In the case of a nested display, the sequence of display of the label shall be as follows:
 - (a) the image referred to in paragraph 5 of this Part shall be shown on the display mechanism in proximity to the price of the product;
 - (b) the image shall link to the label set out in the Third Schedule;
 - (c) the label shall be displayed after a mouse click, mouse roll-over or tactile screen expansion on the image;

- (d) the label shall be displayed by pop up, new tab, new page or inset screen display;
- (e) for magnification of the label on tactile screens, the device conventions for tactile magnification shall apply;
- (f) the label shall cease to be displayed by means of a close option or other standard closing mechanism;
- (g) the alternative text for the graphic, to be displayed on failure to display the label, shall be the charge efficiency measured at fifty percent and ninety percent State of Charge in a font size equivalent to that of the price.

The electronic Product Information Sheet made available by suppliers in accordance with paragraph (a) of subregulation (2) of regulation 26 shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the Product Information Sheet is clearly visible and legible. The Product Information Sheet may be displayed using a nested display or by referring to the product database, in which case the link used for accessing the product information sheet shall clearly and legibly indicate 'Product Information Sheet'. If a nested display is used, the Product Information Sheet shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the link.

FIFTH SCHEDULE

(regulation 33(2))

VERIFICATION PROCEDURE FOR MARKET SURVEILLANCE

1. The verification tolerances set out in this Schedule relate only to the verification of the declared parameters by the Commission and the Standards Authority and shall not be used by the supplier as an allowed tolerance to establish the values in the technical documentation.
2. The values and classes on the label or in the product information sheet shall not be more favourable for the supplier than the values reported in the technical documentation.
3. Where a model has been designed to be able to detect that it is being tested by recognising the test conditions or test cycle, and to react specifically by automatically altering its performance during the test with the objective of reaching a more favourable level for any of the parameters specified in these Regulations or included in the technical documentation or included in any of the documentation provided, the model and all equivalent models shall be considered not compliant.
4. When verifying the compliance of a product model with the requirements laid down in these Regulations, the Commission and the Standards Authority shall apply the following procedure:
 - (a) The Commission and Standards Authority shall verify one single unit of the model.
 - (b) The model of the renewable energy battery shall be considered to comply with the provisions set out in Table 1 of the Second Schedule as applicable to these Regulations if efficiency is not less than the declared value minus 0.05 percent.
 - (c) The efficiency shall be established in accordance with the test procedures in the Second Schedule.
 - (d) If the result referred to in paragraph (b) is not achieved, the Commission and Standards Authority shall randomly select three additional units of the same model for testing.

- (e) The model of the renewable energy battery shall be considered to comply with the provisions set out in Table 1 of the Second Schedule to these Regulations if the average of the three units for the energy efficiency is not less than the declared value minus 0.05 percent.
- (f) The energy efficiency values shall be established in accordance with the Second Schedule.
- (g) If the results referred to in paragraph (e) are not achieved, the model shall be considered not to comply with these Regulations.

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HON. DR. MATTHEW OPOKU PREMPEH
Minister responsible for Energy

