

THE ENERGY ACT

(No. 1 of 2019)

IN EXERCISE of the powers conferred by sections 93 (1), 167, 198 and 208 of the Energy Act, 2019, the Cabinet Secretary makes the following Regulations: —

THE DRAFT ENERGY (SOLAR WATER HEATING) REGULATIONS, 2022

Part I - Preliminaries

Citation

1. These regulations may be cited as the Energy (Solar Water Heating) Regulations, 2022.

Definitions

2. In these regulations, unless the context otherwise requires: -
 - a) "Act" means the Energy Act, 2019;
 - b) "Active solar water heating system" means a solar water heating system that employs a pump to circulate water through a solar collector to a storage tank or to the point of use;
 - c) "Authority" means the Energy and Petroleum Regulatory Authority established under section 9 of the Act;
 - d) "Cabinet Secretary" means the Cabinet Secretary for the time being responsible for energy;
 - e) "Cogeneration" means the production of electricity and heat in one single process for dual output streams;
 - f) "Conventional Backup Water Heating System" means a water heating system that utilizes traditional fuels, including electricity, gas, or similar fuels, separately installed in buildings or integrated into the solar water heating system to provide backup to a solar water heating

system to ensure that there is adequate supply of hot water at all times

- g) **“Completion certificate”** means a document detailing particulars of the solar water heating installation and test results;
- h) **“Direct solar water-heating system”** means a solar water heating system in which water is heated directly in the collector;
- i) **“Indirect solar water-heating system”** means a solar water heating system in which a heat transfer fluid in the collector transfers heat to the water through a heat exchanger;
- j) **“Kenya Standard”** means a specification or code of practice declared by the National Standards Council under section 9 of the Standards Act;
- k) **“Licensee”** means the holder of a licence or certificate issued under these regulations;
- l) **“Local Content”** means the added value brought to the Kenyan economy from energy related activities through systematic development of national capacity and capabilities and investment in developing and procuring locally available work force, services and supplies, for the sharing of accruing benefits as defined under Section 2 of the Energy Act, 2019;
- m) **“Passive solar water heating system”** means a solar water heating system that employs natural convection to circulate water through a solar collector to a storage tank or to the point of use;
- n) **“Person”** means any natural or juridical person;

- o) **“Premises”** means existing, new or alterations and extensions to existing residential or commercial buildings or structures, including-
 - i) small domestic houses as defined in the building code made under the County Governments Act, 2012;
 - ii) all domestic dwellings or residential houses;
 - iii) commercial buildings including hotels, lodges, clubs, restaurants, cafeterias, laundries, eating places and similar premises;
 - iv) health institutions including hospitals, health centres and clinics and similar medical facilities;
 - v) educational institutions including universities, colleges, boarding schools and similar institutions;
- p) **“Renewable energy”** means non-fossil energy generated from natural non-depleting resources including but not limited to solar energy, wind energy, biomass energy, biological waste energy, hydro energy, geothermal energy and ocean and tidal energy;
- q) **“Solar collectors”** include evacuated tube collectors, glazed and unglazed flat plate collectors, and parabolic collectors;
- r) **“Solar water heating system”** means a device or system that uses sunlight to heat water and comprises of solar collectors, storage tanks, controls, installation hardware and fittings;
- s) **“Solar water heating system worker”** or **“worker”** means a natural person certified under these regulations to undertake solar water heating installation work;

- t) **“Solar water heating system contractor”** or **“contractor”** means an entity licensed under these regulations to undertake solar water heating installation work;
- u) **"System Owner"** means a person who owns by virtue of purchase or lease a solar water heating system;
- v) **"Tribunal"** means the Energy and Petroleum Tribunal established under section 25 of the Act;
- w) **“Warranty”** means an assurance or guarantee given to the purchaser by a manufacturer or his agent stating that a product will perform as stated, is reliable and free from known defects and that the manufacturer shall, without charge, repair or replace defective parts within a given time limit and under certain conditions.

Purpose of the Regulations

- 3. The purpose of these regulations is to provide a licensing and regulatory framework for the design, installation, operation, repair, maintenance, and upgrade of solar water heating systems in Kenya to ensure safety and quality in the solar water heating value chain.

Application

- 4. These regulations shall apply to a solar water heating manufacturer, importer, vendor, worker, contractor, and system owner, as well as solar water heating system installations.

Part II – Licensing of Solar Water Heating System Workers

Requirement for Licensing of Solar Water Heating System Workers

- 5. (1) A person shall not undertake any solar water heating system installation work unless the person is licensed by the Authority.
- (2) A person who intends to design, install, test, commission, maintain or repair a solar water heating

system shall make an application to the Authority in accordance with regulation 12.

(3) The Authority shall issue a licence under these regulations where the applicant satisfies the qualifications, training and experience set out in the First Schedule.

Classes of Solar Water Heating System Workers

6. The Authority may, on receipt of an application, grant the applicant one of the following classes of licences and the licensee shall be entitled to undertake work within the scope indicated along licence:-

a.) **Class SHW1** - which shall entitle the holder to design, install, test, commission, maintain and repair standalone/single unit solar water heating system.

b.) **Class SHW2** - which shall entitle the holder to design, install, test, commission, maintain and repair centralized solar water heating system.

Authority May Examine Workers

7. The Authority may cause an applicant for a worker's licence, including applicant's for upgrading of worker's licenses, to be examined in such manner as it may determine and upon any matter or thing in connection with the application for the purpose of ascertaining the applicant's qualification and suitability for grant of the class of licence to which the application relates.

Part III – Licensing of Manufacturers, Importers, Vendors, and Contractors

Requirement Of Licensing of Manufacturers, Importers,

8. (1) A person shall not engage in the importation, manufacture, design, sale or installation of solar water heating systems or components without a valid licence issued by the Authority.

**Vendors, and
Contractors**

(2) The Authority shall, from time to time, publish a notice setting out the types of solar water heating components and solar water heating systems to which this regulation applies.

**Classes of
Manufacturers,
Importers,
Vendors, and
Contractors'
Licences**

9. (1) The Authority may, on receipt of an application, grant the applicant one of the following classes of licenses and the licensee shall be entitled to undertake work within the scope indicated along licence:

a) **Class SHC1** which shall entitle the holder to: -

- i) import and sell solar water heating components.
- ii) design, install, commission, maintain and repair standalone/single unit solar water heating system.

The licensee shall be required to be, or to have in his employment a Class SHW1 worker.

b) **Class SHC2** which shall entitle the holder to: -

- i) import and sell solar water heating components.
- ii) design, install, commission, maintain and repair centralized solar water heating system.

The licensee shall be required to be, or to have in his employment a Class SHW2 worker.

c) **Class SHM** which shall entitle the holder to import parts necessary for the manufacture of solar water heating components, and to manufacture and sell solar water heating components and systems.

**Professional
Indemnity Cover**

10.(1) A solar water heating system worker licensed under regulation 6 shall be required to maintain a professional

indemnity cover equivalent to the cost of the project under development.

- (2) Every contractor shall be required to have a contractor's all risk insurance for each project before the commencement of works.

Local Content Requirements

11. All licenses offered under these regulations shall comply with the local content requirements.

Part IV - General Provisions Regarding Licences

Application for Licences

12. (1) Applications for grant of the various classes of worker, contractor, or manufacturer licenses shall be made electronically or in any other manner that the Authority may, from time to time, prescribe and shall be accompanied by the information and documentation set out in the Second Schedule and proof of payment of the application fees set out in the Third Schedule.

- (2) The Authority shall process all applications and communicate the outcome to the applicants in writing expeditiously and in any event no later than:-

- a) sixty (60) days from the date of receipt of the application in the case of applications for new worker's licenses or upgrades of existing worker licences.
- b) thirty (30) days from the date of receipt of the application in the case of applications for new contractor and manufacturer licenses or upgrades of existing contractor licenses.

c) thirty (30) days from the date of receipt of the application for applications for renewal of both worker and contractor licenses.

(3) Successful applicants shall, upon payment of the licence fees specified in the Third Schedule, be issued with a licence document as set out the Fifth Schedule or in a form that the Authority may, from time to time, prescribe.

Validity of Licence

13. (1) A licence issued under these regulations shall be valid for a period of three (3) years from the date of issue unless the applicant applies for a licence valid for a one (1) year period.

(2) The application and renewal fees for one (1) year validity shall be a third of the application or renewal fees specified in the Third Schedule.

Renewal of Licences

14. (1) An application for renewal of a licence shall be made thirty days prior to the date of expiry of the licence.

(2) A licensed worker who wishes to renew their licence shall demonstrate to the Authority accumulation of at least thirty (30) credit points through Continuous Professional Development as outlined in the Sixth Schedule.

(3) A licensee who makes an application for renewal of a licence after its date of expiry shall be liable to the penalty set forth in regulation 32.

(4) Any licence issued and is not renewed for six months after its date of expiry shall, unless the licence holder has before expiry of the licence informed the Authority in writing of the intention and reasons not

to renew the licence, not be eligible for renewal and will require the licensee to apply for the licence anew.

Upgrading of Licences

- 15.(1) A licensee who wishes to upgrade from one licence class to another shall make an application to the authority for such an upgrade at least one (1) year after issuance of the current licence.
- (2) The Authority shall approve the upgrading of a worker's licence if the worker has met the required academic and professional qualifications, and job experience as set out in the First Schedule.
- (3) The Authority shall approve the upgrading of a contractor's licence where the contractor demonstrates that he has in his employment a licensed solar water heating worker appropriate to the class of licence for which the upgrade is sought.
- (4) The upgrading of a licence shall be subject to the licensee paying the licence fee for the class of licence to which the upgrade is sought.

Replacement of Lost or Defaced Licence

16. Where a licensee demonstrates to the Authority that a licence issued under these regulations has been defaced, destroyed or lost, the Authority may, on payment of the fees prescribed in the Third Schedule issue a duplicate licence.

Suspension or Revocation of Licences

- 17.(1) The Authority may suspend or revoke any licence issued under these regulations where it is satisfied that a licensee has breached the provisions of these regulations or any conditions attached to the licence.
- (2) The Authority shall, prior to suspending or revoking a licence under this regulation, by notice in writing afford the licensee an opportunity to show cause why the licence should not be suspended or revoked.

(3) A notice to show cause issued hereunder shall contain sufficient information to enable the licensee discern the specific incidences of non-compliance in issue.

(4) A licensee shall be entitled to appear before the Authority with or without representation to show cause why his licence should not be revoked.

Part V - Design, Installation, and Maintenance of Solar Water Heating Systems

Installation and Use of Solar Water Heating Systems

18. All premises shall have in their design a provision for solar water heating system installation.

Demand Calculation and Minimum Hot Water Demand

19. (1) County Governments shall as necessary, develop legislation on the minimum annual contribution of solar water heating systems to premises' hot water demand.

(2) County legislation made under sub regulation (1) shall exempt from the requirements premises: -

- a) with technical limitations;
- b) incapable of incorporating solar water heating systems due to their special circumstances;
- c) supplied with hot water from a cogeneration plant in or proximate to the premises; or
- d) utilizing electricity generated from renewable energy and the excess is used to heat water as a dump load.

(3) The daily hot water demand shall be calculated using the specific hot water demand values specified in Part A of the Seventh Schedule.

Responsibility for Compliance

20. (1) A developer of a housing estate, a promoter of the construction, an owner of the premises or an Architect or an Engineer engaged in the design or construction of premises shall be responsible for compliance with regulation 18.
- (2) A person who contravenes the provisions of this regulation commits an offence.

Standardisation

21. (1) A person shall not use or employ for the purposes of or in connection with a solar water heating system, any mode, material or apparatus other than that which complies with the Kenya Standard.
- (2) A solar collector shall, for the purposes of these regulations, be of the unglazed flat plate, glazed flat plate or evacuated tube collector technologies or any other type that meets the Kenya Standards for solar collectors.
- (3) A glazed, evacuated tube collector or any other type that meets the Kenya Standards for collectors shall be used in all installations except in installations for heating swimming pools where unglazed collectors may be used.
- (4) The storage capacity of a solar water heating system shall not be less than one and a half times the daily hot water demand of the premises.
- (5) The hot water storage tanks shall be insulated.
- (6) All components selected for use in the installation of a solar water heating system shall be corrosion resistant.
- (7) Selection of components for plumbing works in a solar water heating system shall be in accordance

with the planning and building code made under the County Government Act, 2012 or any subsequent or replacement law.

**Conventional
Backup Water
Heating System**

22. (1) The conventional back-up water heating systems that utilize traditional fuels, including electricity, gas, or similar fuels, may be separately installed in buildings or be integrated into the solar water heating system to ensure that there is an adequate supply of hot water at all times.
- (2) The back-up system shall be designed to supplement a solar water heating system by operating when absolutely necessary to supply the energy deficit from solar collectors due to adverse weather conditions or a solar water heating system defect.

**Compliance with
Technical, Legal
and Regulatory
Requirements**

23. (1) The design, installation, testing, commissioning, repair and maintenance of a solar water heating system shall be in accordance with the Code of Practice – Solar Water Heating for Domestic Hot Water; Kenya Standard KS 1860:2009 or any subsequent or replacement standard.
- (2) The design, installation, testing, commissioning, repair and maintenance of a solar water heating system shall also be in accordance with the building code made under the County Government Act, 2012 or any subsequent or replacement law.
- (3) Solar collectors shall be installed in accordance with the solar water heating system installation standards set out in Part B of the Seventh Schedule.
- (4) The incorporation of a solar water heating system in premises shall comply with requirements of all other

relevant technical, legal and regulatory requirements applicable in Kenya.

System Design Declaration

24. (1) A licensed worker shall design a solar water heating system to meet the requirements outlined in the relevant Kenya Standard.

(2) Prior to installation, a licensed worker or licensed contractor shall be required to provide to the client a system design declaration together with the system drawing and calculations. The system design declaration shall indicate: -

- a) An analysis of the user's hot water requirements;
- b) The specifications of the proposed solar water heating system solution including the capacity and number and type of solar collectors to be installed;
- c) A priced bill of quantities for the installation including potential costs likely to be incurred during the installation;
- d) Layout of the area where the proposed installation is to be done;
- e) The time to be taken to undertake the proposed installation; and
- f) Any work that is required to be done by the system owner to prepare the site for the installation.

(3) Where a system owner purchases any individual solar water heating system component, the worker or contractor shall indicate that fact in the system design declaration.

(4) A system design declaration must be signed by both the worker or contractor and the system owner prior to the commencement of the installation work and a copy thereof retained by the system owner.

**Certificates,
Warranty and
Documentation**

25. A solar water heating system worker or contractor shall upon completion of installation work issue the system owner with the following documentation: -

- a) A Completion certificate including a declaration that the system owner has been trained on the safe use and maintenance of the solar water heating system;
- b) A one-year warranty for the installation workmanship;
- c) The “as built” system design and drawings;
- d) The manufacturer documentation and warranties for the solar water heating system or components thereon;
- e) User manuals with respect to the solar water heating system;
- f) Instructions for the safe disposal of the solar water heating system and system components in accordance with the Environment Management and Co-ordination Act, 1999, a revised version of this law, and any regulations, rules or guidelines issued thereunder with respect to the disposal of electronic waste.
- g) An installation certificate for the premises, which should indicate the date of installation, the

capacity of the solar water heating system, details of the installer, and warranty.

- Products to carry Warranties** 26. A manufacturer, worker, or contractor shall provide a warranty to the customer for the components in the solar water heating system for the periods set out in the Eighth Schedule.

Part VI - Register of Licensees and Provision of Data

- Authority to Maintain Register of Licensees** 27. The Authority shall maintain and publish on its website a register of all licensed solar water heating system workers and licensed contractors.

- Provision of Data** 28. (1) All licensees under these regulations shall continuously provide the Authority with information on the solar water heating systems installed during the licence period, specifying the location, capacity and type of system, and components manufactured, sold and installed during the licence period.
- (2) The Authority shall, from time to time, prescribe and publish the format and time durations in which the data required under this part shall be provided.
- (3) All licensed solar water heating system workers and licensed contractors shall maintain the records required under this part for a period of five years.

Part VII – Powers of Inspection and Compliance Orders

- Powers of Inspection** 29. The Authority or its agent may carry out inspection, in relation to compliance with these regulations, in accordance with Section 11 of the Act.

- Compliance Orders** 30. (1) Where the Authority finds that any provisions of these regulations have been contravened by a worker or contractor, or that a condition has arisen which may

lead to the contravention of these regulations, the Authority may issue a compliance order compelling the person to comply with the regulations.

(2) An order issued under sub-regulation (1) shall state:-

- a) the specific provision(s) which have been or are likely to be contravened;
- b) the measures which should be taken to rectify the contravention; and
- c) the period within which the order shall be complied with.

(3) A person who does not comply with a notice issued under (1) within the specified period commits an offence.

Part VIII – Offences, Fines and Penalties

Practising without a licence or certificate

31. (1) A person who, without a licence issued by the Authority undertakes the importation, manufacture, sale, design, installation, commissioning, maintenance, or repair of solar water heating system commits an offence and shall, upon conviction be liable to a fine of twenty thousand shillings or to six months imprisonment.

(2) Where a person is charged with offences under this regulation, he may request the Authority to compound the offence and prescribe a fine to be paid and upon payment of such fine, the Authority shall withdraw any criminal complaint against the person.

(3) Where the Authority compounds an offence and the person charged with committing the offence pays the

prescribed penalty, the Authority shall withdraw the criminal complaint against the person.

**Other Offenses
and Fines**

32. (1) A licensee who is found to be guilty of any of the offences listed below shall be liable to the fine or penalty indicated beside the offence.

Offence	Fine/ Penalty
a) Late renewal of a licence	Kshs.100 for every day the licence is not renewed
b) Practicing with an expired licence	Kshs.10,000 for every day the violation occurs.
c) Undertaking works in excess of the scope provided under the issued licence	Kshs.10,000 per incident.
d) Offering for sale solar water heating systems and components that do not meet the relevant Kenya Standard	Kshs.5,000 for every component that does not meet the Kenya Standard.
e) Failing to provide a system owner with a system design declaration prior to commencing installation works	Kshs.20,000 per incident.
f) Failing to provide a system owner with a completion certificate with respect to an installed solar water heating system	Kshs.20,000 per incident.
g) Failing to provide the system owner with warranty covering	Kshs.20,000 per incident.

the matters specified in regulation 26.

- h) Failing to submit data to the Authority in the manner specified in regulation 28. Kshs.5,000
- i) Providing inaccurate or incomplete data to the Authority Kshs.5,000
- j) Preventing an officer or duly notified agent of the Authority during working hours, from entering into and inspecting any premises where a licensed activity taking place or suspected to be taking place. Kshs.20,000 for every day that the incident persists.

(2) The fines or penalties in regulations 31 and 32(1) are without prejudice to the Authority's right to suspend or revoke the licensee's licence.

(3) Where installation has taken place in violation of these regulations, the responsible licensee shall decommission the installation at their own cost and where the licensee fails to do so, the Authority may cause the system to be decommissioned at the cost of such licensee.

(4) Payment of penalties or fines hereunder shall not absolve or indemnify a licensee from any obligations to compensate a system owner.

(5) Any fines or penalties which are not paid shall be a civil debt recoverable summarily.

Part IX - Complaints, Disputes and Appeals

**Complaints and
Disputes to be
Referred to the
Authority**

33. Any complaints and/or disputes between a system owner and a licensee or between two or more licensees shall be referred to the Authority for resolution in accordance with the Energy (Complaints and Disputes Resolution) Regulations 2012 or any replacement of the same.

Appeals

34. A licensee or system owner who is dissatisfied or aggrieved by a decision of the Authority shall lodge an appeal with the Energy and Petroleum Tribunal.

**Transitional
Provisions**

35. The transition provisions set out in the Ninth Schedule shall apply.

FIRST SCHEDULE (r. 5(3), 15(2))

QUALIFICATIONS AND EXPERIENCE FOR LICENSING AS A SOLAR WATER HEATING WORKER

To be certified as a solar water heating system worker, an applicant must have a minimum of any one of the following combinations of academic and professional qualifications, and job experience.

Certificate Class	Education (Academic)	Professional (Job) Experience
SHW1	KCSE, Government Trade Test 1 or Certificate in Mechanical or Electrical and Basic SWH Training from a recognised institution	(1) Completion Certificates of at least two (2) solar water heating systems that the applicant has been involved in directly. (2) Design documentation of at least two (2) solar water heating systems that the applicant has been involved in directly.
SHW2	Bachelor of Science or Higher National Diploma or Diploma in Mechanical, Mechatronic or Electrical Engineering and Advanced SWH Training from a recognised institution Or Bachelor of Science degree with at least three (3) units/courses specific to mechanical engineering and Advanced SWH Training from a recognised institution.	(1) Completion Certificates of at least three (3) solar water heating systems each with a capacity of not less than 500 litres that the applicant has been involved in directly. (2) Design documentation of at least three (3) solar water heating systems each with a capacity of not less than 500 litres that the applicant has been involved in directly.

The Authority shall only recognize academic certificates approved by the relevant regulatory bodies in Kenya.

SECOND SCHEDULE (r. 12(1))

DOCUMENTATION TO ACCOMPANY APPLICATIONS FOR LICENCES

A. NEW APPLICATIONS

Worker Certificate

1. Solar Water Heating Training certificate from an accredited institution.
2. Duly filled application form documenting all requirements
3. Completion certificates of work done detailing the following:
 - a) Solar water heating system location
 - b) Date solar water heating system was completed
 - c) Solar water heating system information
 - d) Name, phone number and licence number of licenced solar water heating workers the Applicant worked under
 - e) Description of work performed by the Applicant
4. Design documentation signed and stamped by the company they worked for (where applicable).

Contractor Licence

1. Duly filled application form documenting all requirements Certified copy of the certificate of incorporation or business registration certificate;
2. Certified copy of form CR 12 from registrar of companies or CR 13 from the Business Registration Service, that is not older than 12 calendar months from the date of issue;
3. Certified copies of identification documents (National IDs or Passports) for all the company's directors;
4. Certified copy of a valid Work Permit Class "G" for foreign directors working in Kenya or notarized declaration of non-residence for foreign directors not residing in Kenya;
5. Certified copy of a valid Single Business Permit from the County Government;

6. Copy of PIN Certificate;
7. Copy of a valid tax compliance certificate;
8. Proof of Occupancy of the Company's Office;
9. Signed consent letter between the contractor and solar water heating worker attested by Commissioner for Oaths clearly indicating the engagement period, which period shall not be less than one (1) year;

B. RENEWAL

Worker Certificate

1. Proof of accumulation of at least thirty (30) credit points through Continuous Professional Development.

Contractor Licence

1. Certified copy of form CR 12 from registrar of companies or CR 13 from the Business Registration Service, that is not older than 12 calendar months from the date of issue;
2. Certified copies of identification documents (National IDs or Passports) for all the company's directors;
3. Certified copy of a valid Work Permit Class "G" for foreign directors working in Kenya or notarized declaration of non-residence for foreign directors not residing in Kenya;
4. Certified copy of a valid Single Business Permit from the County Government;
5. Copy of PIN Certificate;
6. Copy of a valid tax compliance certificate;
7. Proof of Occupancy of the Company's Office;
8. Signed consent letter between the contractor and solar water heating worker attested by Commissioner for Oaths clearly indicating the engagement period, which period shall not be less than one (1) year;

C. REPLACEMENT OF CERTIFICATES/LICENCES

1. Duly filled application form documenting all requirements

2. Police Abstract issued by the National Police Service indicating when and where the certificate/licence was lost or original copy of the defaced licence

THIRD SCHEDULE (r. 12(1), 12(3), 13(2), 16)

LICENSING FEES

Class of licence	Application Fees (Kshs)	Licence Fees (Kshs)	Renewal Fees (Kshs)	Replacement Fees (Kshs)
SHW1	500	2,000	3,000	500
SHW2	750	3,000	4,500	500
SHC1	2,000	3,000	4,500	1,000
SHC2	3,000	5,000	6,000	1,000
SHM	3,000	5,000	6,000	1,000

FOURTH SCHEDULE
APPLICATION FORMS

Form EPRA 001

APPLICATION FOR A SOLAR WATER HEATING WORKER CERTIFICATE

The Director General
Energy and Petroleum Regulatory Authority
P.O. Box 42681- 00100, GPO

NAIROBI

I, hereby apply to be certified as a Solar Water Heating worker in accordance with the Energy (Solar Water Heating) Regulations, 2022 for the following class* of certificate-

- (a) **Class SHW1** which shall entitle the certificate holder to design, install, test, commission, maintain and repair stand-alone/single unit solar water heating system
- (b) **Class SHW2** which shall entitle the certificate holder to design, install, test, commission, maintain and repair centralized solar water heating system

**(Delete class that does not apply)*

I commit to carry out all solar water heating works in accordance with the Energy (Solar Water Heating) Regulations, 2022 and any regulations and by-laws for the time being in force thereunder.

Purpose of Application: New Application Renewal Upgrade
Replacement (Please tick (✓) as appropriate)

1. Name of applicant

.....

(Block capitals, surname first)

2. Income Tax Personal Identification Number:

3. Postal Address.....

4. Email Address:

5. Telephone number(s):

6. Date of Birth:

7. Nationality:

8. Name and address of present employer, if any

.....
.....
.....
.....

9. Name of present job

10. Academic qualification:

a)

b)

11. Professional Qualification (Government Trade Test Certificate etc.):

a)

b)

c)

(Insert additional lines as appropriate)

12. Work experience (including apprenticeship (if any):

a)

b)

c)

(Insert additional lines as appropriate)

13. Do you have any knowledge of Occupational Safety and Health Regulations: Yes No

14. Have you applied for a certificate in the past? Yes No

a.) If yes and approved provide details of last certificate;

i. Certificate No

ii. Issued on

iii. Issued by

b.) If yes and application rejected, give details

.....
.....
.....
.....
.....

15. Has any previous certificate been cancelled under these regulations? Yes
No

(If Yes, give details)

.....
.....
.....
.....
.....

I declare that the particulars given by me are true and accurate. I understand that it is an offence to give false information in an application for a certificate.

Date:Signature of Applicant:

REFEREES

(The following details to be completed by two independent referees who must have known the applicant’s ability very well, preferably in the trade)

1st Referee

I declare that the particulars given by the applicant in this form are true and correct to the best of my knowledge.

Full Name:

.....

(Block letters, surname first)

Occupation:

.....

Postal address:

.....

.....

Email Address:

Telephone number(s):

Solar Water Heating certificate No. (If any).....

I have known the above person for years.

Position held at present.....

Date.....Signature of 1st referee.....

2nd referee

I declare that the particulars given by the applicant in this form are true and correct to the best of my knowledge.

Full Name:

.....

(Block letters, surname first)

Occupation:

.....

Postal address:

.....

.....

Email Address:

Telephone number(s):

Solar Water Heating certificate No. (If any)

I have known the above person for years.

Position held at present.....

Date..... Signature of 2nd referee

Form EPRA 002

APPLICATION FOR A SOLAR WATER HEATING CONTRACTOR LICENCE

(A separate application form must be completed in respect of each separate business establishment)

The Director General

Energy and Petroleum Regulatory Authority

P.O. Box 42681, 00100 GPO

NAIROBI

I/We

hereby apply to be licensed as a solar water heating contractor (delete as appropriate) in accordance with the Energy (Solar Water Heating) Regulations, 2022 for the following class* of licence-

- a) **SHC1** which shall entitle the licence holder to import, distribute, design, install, test, commission, maintain and repair stand-alone/single unit solar water heating system. The licensee shall be required to be, or to have in his employment a **Class SHW1** licence solar water heating worker.
- b) **SHC2** which shall entitle the licence holder to import, distribute, design, install, test, commission, maintain and repair centralized solar water heating system. The licensee shall be required to be, or to have in his employment a **Class SHW2** licence solar water heating worker.
- c) **SHM** which shall entitle the licensee to import parts necessary for the manufacture of solar water heating components, and to manufacture and sell solar water heating components and systems.

**(Delete classes that do not apply)*

I/ We commit to carry out all design distribution, promotion, sale and installation work for solar water heating system undertaken by me/ ourselves in accordance with the Energy (Solar Water Heating) Regulations, 2022 and any rules and by-laws for the time being in force thereunder.

Purpose of Application: New Application Renewal Upgrade Replacement
(Please tick (✓) as appropriate)

1. Name of applicant

.....
.....

2. Details of applicant:

a) Income Tax Personal Identification Number:

b) Postal Address:

c) Email Address:.....

d) Telephone number(s):

e) LR/ Plot No.....Building Name.....

f) Street/:

g) Town/County:

3. Location of business premise(s)

a)

b)

c).....

(Insert additional lines as appropriate)

4. Give full details of proprietors or partners owning business or directors/shareholders of the company, as applicable.

Name

Nationality

.....
.....
.....

(Insert additional lines as appropriate)

5. State if you are or any of your partners/directors is an un-discharged bankrupt. (If so, indicate the names).

- a)
- b)
- c)

(Insert additional lines as appropriate)

6. For new applications, certified copies of the following documents should be submitted with the application for a licence:

- a) If Kenyan, a copy of ID card, or if non-Kenyan, a copy of current work permit together with copies of pages 1 and 5 of the passport;
- b) Relevant entry permits(s) for non-citizens;
- c) Copy of Business name Registration Certificate or Certificate of Incorporation and Memorandum and Articles of Association in case of a company (whichever is applicable).
- d) Lease agreement or letter from landlord confirming tenancy.
- e) PIN and VAT certificates.
- f) Valid Tax compliance certificate.
- g) Any other document that may be required by the Commission from time to time.

7. Name and address of bank(s) or financial institution(s) where the business account(s) is/are maintained

- a)
- b)
- c)

(Insert additional lines as appropriate)

8. List of certified Solar water heating worker(s)

Full name	Certificate No.
.....
.....
.....

(Insert additional lines as appropriate)

9. Previous solar water heating work experience

.....

.....

.....

.....

.....

(Insert additional lines as appropriate)

10. Have you applied for a licence in the past? Yes No

a.) If yes and approved provide details of last licence;

- i. Licence No
- ii. Issued on
- iii. Issued by

b.) If yes and application rejected, give details

.....
.....
.....
.....

11. Has any previous licence been cancelled under these regulations? Yes No

(If Yes, give details)

.....
.....
.....
.....

DECLARATION

I/We hereby, declare that the information I/we have provided in the application is true and accurate. I/We understand that it is an offence to give false information in an application for a licence.

Signature of Applicant Date

Signature of Applicant Date

Signature of Applicant Date

REFEREES

(The following details to be completed by two different and independent referees, who would vouch your competence to operate as a contractor / vendor (delete as appropriate) if licensed, your technical ability having already been established. Persons who may not understand what is involved in running a business cannot be accepted as referees).

1st Referee

I certify that the information given in this form is true and correct to the best of my knowledge

Full name.....

(Block letters, surname first)

Occupation.....

Postal address.....

Email Address:

Telephone number(s):

Date..... Signature of 1st referee.....

2nd Referee

I certify that the information given in this form is true and correct to the best of my knowledge

Full name:

(Block letters, surname first)

Occupation.....

Postal address.....

Email Address:

Telephone number(s):

Date: Signature of 2nd referee

FIFTH SCHEDULE (r. 12(3))

FORM OF LICENCE

LICENCE

(SOLAR WATER HEATING SYSTEMS CLASS (.....))

Licence Number.....

This is to Certify that

..... (Name of Licensee) of Tel/Mobile:.....of P.O.

Code Town.....

Having duly complied with all the requirements of the Energy (Solar Water Heating) Regulations 2022 is hereby licensed to

.....
(Scope of licence)

For the purpose of this licence, the Licensed Solar Water Heating Systems worker(s)/Contractors and the Licence No(s) is/ are-

Solar Water Heating Systems Worker/Contractor's Name	Licence Number

Issue Date.....

Expiry

Date.....

SIGNATURE: _____

Director General

Energy and Petroleum Regulatory Authority

Terms & Conditions

GENERAL CONDITIONS

1. The licence is valid for calendar years as provided on the licence issued
2. The licensee shall not transfer or otherwise divest any rights, powers or obligations conferred or imposed on him by the licence without permission from the Energy and Petroleum Regulatory Authority
3. Application for licence renewal shall be made at least thirty (30) days before the licence expiry date
4. The licensee shall ensure replacement of the licence if lost, defaced or destroyed. For a lost licence, the licensee shall provide a police abstract
5. Upon withdrawal of the licensed solar water heating systems worker from the licensed firm, the licence shall remain valid for thirty (30) days a period within which the Authority will require the firm to provide an alternative solar water heating systems worker. The licensee shall notify the Energy and Petroleum Regulatory Authority in writing of any incident or accident in the course of their work immediately and in any case not more than 48 hours after the occurrence of such an accident or incident
6. The licensee shall not carry out any work unless the licence is valid.

SPECIFIC CONDITIONS

1. The design, installation, repair, and maintenance of a solar water heating system shall be in accordance with the relevant Kenyan Standard.
2. Any solar water heating system design done by the licensee shall take into account the hot water needs and safety of the user, and ensure that these aspects are appropriately matched
3. A system design declaration indicating the user's hot water needs and proposed design shall be prepared by the licensee for systems sold or installed and signed by both the licensee and the customer.
4. The licensed firm shall issue an installation completion certificate showing as a minimum, the date of installation, details of the person installing, details of the owner, the location, capacity and warranty upon completion of an installation.
5. A licensed firm shall issue a warranty to the customer for the components in the solar water heating system as provided for in the regulations.
6. Contravention of the general and specific terms and conditions herein shall lead to certificate revocation and legal action

SIXTH SCHEDULE (r. 14(2))

CONTINUOUS PROFESSIONAL DEVELOPMENT

A. Certificate renewal

The licensee shall accumulate a minimum of 10 credit points per year and thus, 10 points at the expiry of a 1-year term certificate and 30 points at the expiry of a 3-year term certificate as follows:

1. Attending relevant trainings or seminars or workshops; 0.2 credit points per contact hour
2. Giving relevant seminar or training or workshop as a resource person; 0.5 credit points per contact hour
3. Presenting a paper on a relevant topic at a conference or publishing a paper in a journal; each paper 2 credit points
4. Project credit points earned through experience gained from design, installation, testing and commissioning, operation and maintenance of solar PV projects according to the class of certificate as follows:

<i>Certificate Class</i>	<i>Project credit points</i>	<i>Project</i>
SHW1	4	For each system installed
SHW2	4	For each system installed with at least one above 500 litres

The project credit points shall account for a minimum of 24 points.

SEVENTH SCHEDULE (r. 19(3), 23(3))

PART A

HOT WATER DEMAND CALCULATIONS

<i>Type of Building Premises</i>	<i>Specific Daily Hot Water Demand (DHWD) in litres per day at 60 °C</i>
Domestic residential houses	30 per person
Educational institutions such as colleges and boarding schools	5 per student
Health institutions such as Hospitals, Health Centres, clinics and similar medical facilities	50 per bed
Hotels, Hostels, Lodges and similar premises providing boarding services	40 per bed
Restaurants, Cafeterias and similar eating places	5 per meal
Laundries	5 per kilo of clothes

- i) Hot Water Demand calculations at other temperatures shall be adjusted for the 60°C reference temperature. For the purposes of making the adjustment, the following equation shall be used:

$$D(T) = \frac{D(60) * 45}{T - 15}$$

Where

D(T) is hot water demand in litres

D(T60) is the Specific Daily Hot Water Demand (DHWD) in litres per day at 60 °C for the various applications derived from the table above

T is the temperature at which hot water is required for the specific application

The equation assumes that the temperature of the cold water (inlet water temperature) is 15°C and a linear relationship of 45°C is the difference between 60°C and 15°C.

- ii) For buildings with seasonal variations in hot water demand such as Hotels, Game Lodges and similar premises, the demand may be adjusted by an annual occupancy rate factor of not less than 70%.
- iii) In calculating the demand, it shall be assumed that the daily hot water demand is constant, throughout the year.
- iv) In calculating demand for domestic residential houses, the number of persons shall be taken to be equal to the number of bedrooms X 1.5
- v) In calculating the heat load of SWH system, heat losses in the hot water distribution system shall be taken into account.

PART B

INSTALLATION STANDARDS FOR SOLAR WATER HEATING SYSTEM

Stationary solar collectors shall be installed at an angle between 10° and 20° from horizontal plane and/or facing the equator:

Provided that the stationary solar collector area shall be increased by 10% for tilt angles of up to 30° and 20% for tilt angles of up to 40° for technical or aesthetic reasons and/or increased by 10% if the deviation from the direction of the equator is above 25°.

EIGHTH SCHEDULE (r.26)

MINIMUM WARRANTY ON SOLAR WATER HEATING SYSTEMS AND COMPONENTS

Component	Warranty period
Controller/regulator	5 years
Collector	5 years
Storage tank	5 years
Workmanship	1 year

NINTH SCHEDULE – TRANSITIONAL CLAUSES (r.35)

- a) The Authority may waive the requirement for Completion Certificate of Work Done in the first instance under requirements for licencing of solar water heating system worker.
- b) The fines in regulation 32(1) shall apply for any falsified records.
- c) The application for transition shall be processed within thirty (30) days from the date of application.