

## WP 2: Certification or equivalent qualification schemes of small-scale RES

### Key-success criteria

#### D2.3 – Matrix with ranked success features covering 5 critical aspects

#### INTRODUCTION

As a result of the data on existing schemes for accreditation and training in Europe collected during a first step of the QualiCert project, a matrix was developed which aims at bringing together the most important elements of a certification or equivalent qualification scheme and at organizing those data according to the following 5 critical aspects: technical, legal, institutional, financial and communication. The ranking of the data will bring to the definition of the features that best contribute to the success of the above mentioned scheme.

In the following document, the word “installer(s)” refers to an individual who or an installation company which plans, installs, maintains and troubleshoots a small-scale RE system. The criteria listed in the document may apply to a Quality scheme designed for certification or equivalent qualification of a company, an individual, or both. This is indicated in the left column of the tables that follow.

We cordially invite you to rank the below listed criteria from your own professional background. To facilitate the validation of results received, we kindly ask you to inform us whether your experience refers to:

- A Quality scheme designed for certification or equivalent qualification of **a company**
- A Quality scheme designed for certification or equivalent qualification of **an individual**
- A Quality scheme designed for certification or equivalent qualification of **both** a company and an individual

In order to ensure good understanding of key-terms related to QualiCert project, a specific glossary has been developed which is presented in the Annex. We advise you to read this glossary before filling in the matrix.

*QualiCert WP 2\_Matrix of key success criteria*

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The table below allows you to rank every criteria mentioning whether you consider a feature is essential, important, not very important or not important for the success of the Quality scheme. For the criteria you consider as “Essential” or “Important”, a justification in the comments right column would be of high interest for analysis of the final results. When filling in this document, you should keep in mind that the purpose of this work is to identify best practices and then produce a set of recommendations for the success of a Quality scheme.

Furthermore, we kindly ask you to provide us with your name, affiliation & contact details in case of further questions:

Name:

Company:

Contact details (email & phone):

**Please send the filled in document back to Mr William Mademba-sy (w.madembasy@qualit-enr.org )**

## Obtaining certification or equivalent qualification

Company, Individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<b>1. Legal</b>						
<b>Company</b>	<u>The company must provide the following information :</u>						
	<ul style="list-style-type: none"> <li>Documentation about the company's legal registration</li> </ul>						
	<ul style="list-style-type: none"> <li>Documentation about the company's staff and activities</li> </ul>						
	<ul style="list-style-type: none"> <li>Identity of technical referent(s)</li> </ul>						
	<ul style="list-style-type: none"> <li>Civil-liability insurance</li> </ul>						
	<ul style="list-style-type: none"> <li>Proof of compliance with tax obligations</li> </ul>						
<b>Both</b>	The Quality scheme is defined by the Member State or an accredited awarding body						
<b>Both</b>	In the case the quality scheme is a certification system, the scheme is monitored by a trusted third-party						

Company, Individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
<i>Both</i>	The certification or equivalent qualification is mandatory as regards building regulations						
<i>Both</i>	The installer must sign a binding agreement with the awarding body						
	<b>2. Institution</b>						
<i>Both</i>	<u>The actors involved in the set up of the scheme include representatives of:</u>						
	<ul style="list-style-type: none"> <li>installers</li> </ul>						
	<ul style="list-style-type: none"> <li>industry</li> </ul>						
	<ul style="list-style-type: none"> <li>trade unions</li> </ul>						
	<ul style="list-style-type: none"> <li>consumers</li> </ul>						
	<ul style="list-style-type: none"> <li>training institutions</li> </ul>						
	<ul style="list-style-type: none"> <li>technical experts</li> </ul>						
	<ul style="list-style-type: none"> <li>a public body</li> </ul>						

Company, Individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
<i>Both</i>	<u>The actors involved in the management of the scheme include representatives of:</u>						
	<ul style="list-style-type: none"> <li>• installers</li> </ul>						
	<ul style="list-style-type: none"> <li>• industry</li> </ul>						
	<ul style="list-style-type: none"> <li>• trade unions</li> </ul>						
	<ul style="list-style-type: none"> <li>• consumers</li> </ul>						
	<ul style="list-style-type: none"> <li>• training institutions</li> </ul>						
	<ul style="list-style-type: none"> <li>• technical experts</li> </ul>						
	<ul style="list-style-type: none"> <li>• a public body</li> </ul>						
<i>Both</i>	<u>The actors involved in awarding the certification or equivalent qualification include representatives of:</u>						
	<ul style="list-style-type: none"> <li>• installers</li> </ul>						
	<ul style="list-style-type: none"> <li>• industry</li> </ul>						

Company, Individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<ul style="list-style-type: none"> <li>trade unions</li> </ul>						
	<ul style="list-style-type: none"> <li>consumers</li> </ul>						
	<ul style="list-style-type: none"> <li>training institutions</li> </ul>						
	<ul style="list-style-type: none"> <li>technical experts</li> </ul>						
	<ul style="list-style-type: none"> <li>a public body</li> </ul>						
	<b>3. Technical</b>						
<i>Both</i>	<u>The installer must provide documentation about :</u>						
	<ul style="list-style-type: none"> <li>equipment used</li> </ul>						
	<ul style="list-style-type: none"> <li>a number of recent installations realized</li> </ul>						
<i>Both</i>	The installer must undergo a third party audit of an installation						
<i>Individual</i>	<u>The individual must provide the following information :</u>						

Company, Individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<ul style="list-style-type: none"> <li>proof of relevant education</li> </ul>						
	<ul style="list-style-type: none"> <li>proof of relevant professional training</li> </ul>						
	<ul style="list-style-type: none"> <li>proof of relevant previous experience</li> </ul>						
<b>Company</b>	<u>The company must provide the following information regarding its technical referent(s) :</u>						
	<ul style="list-style-type: none"> <li>proof of relevant education</li> </ul>						
	<ul style="list-style-type: none"> <li>proof of relevant professional training</li> </ul>						
	<ul style="list-style-type: none"> <li>proof of relevant previous experience</li> </ul>						
	<b>4. Financial</b>						
<i>Both</i>	Installers bear costs for obtaining the certification or equivalent qualification						
<i>Both</i>	The industry brings financial support to the Quality scheme						
<i>Both</i>	The Quality scheme is supported by public funds						

Company, Individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
<i>Both</i>	Certification or equivalent qualification is linked to subsidy scheme for consumers						
<i>Both</i>	The awarding body is economically independent						
	<b>5. Communication</b>						
<i>Both</i>	<u>Promotion of the certification or equivalent qualification (short advertising films or documents marketing campaign, ...) towards :</u>						
	<ul style="list-style-type: none"> <li>• Installers</li> </ul>						
	<ul style="list-style-type: none"> <li>• Consumers</li> </ul>						
<i>Both</i>	The list of certified/qualified installers is publicly available						
<i>Both</i>	The Quality scheme includes provision of information to certified/qualified installers (e.g. in the format of a regular newsletter about new regulations, technical updates, etc.)						
<i>Both</i>	Installers have access to communications tools (stickers for vehicles, flyers, panels,...)						
<i>Both</i>	There is a public website about the Quality scheme						
<i>Both</i>	Installers have online reserved access (information about the Quality scheme, communication tools,...)						

## Renewing certification or equivalent qualification

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<b>1. Legal</b>						
<i>Both</i>	<u>The installer must provide :</u>						
	<ul style="list-style-type: none"> <li>same documentation as for obtaining the certification or equivalent qualification</li> </ul>						
	<ul style="list-style-type: none"> <li>up-to-date documentation if needed</li> </ul>						
<i>Both</i>	The certification or equivalent qualification is awarded for a certain duration (e.g. one year) or until a deadline (e.g. January 1 <sup>st</sup> of the year following certification or equivalent qualification)						
	<b>2. Institution</b>						
<i>Both</i>	Renewing is granted by a dedicated appointed body						
<i>Both</i>	Renewing is granted by the same body awarding certification or equivalent qualification						
	<b>3. Technical</b>						
<i>Both</i>	The installer must provide documentation about installations realized						

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
<i>Both</i>	The installer must provide evidence of a predefined minimal number of installations realized during the period of validity of the certification or equivalent qualification (predefined minimal number of installations)						
<b>Individual</b>	The individual must go through further professional training						
<b>Company</b>	The company technical referent(s) must go through further professional training						
<b>Individual</b>	The individual must pass an examination						
<b>Company</b>	The technical referent(s) must pass an examination						
<i>Both</i>	In the case the quality scheme is a certification system, the installer must pass a third-party audit inspection of an installation						
	<b>4. Financial</b>						
<i>Both</i>	Installers bear costs for renewing the certification or equivalent qualification						
	<b>5. Communication</b>						
<i>Both</i>	An updated list of certified/accredited installers is communicated to partners and concerned stakeholders						

## Training

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<b>1. Legal</b>						
<i>Both</i>	Training programmes are approved by an authoritative body or have received formal recognition of Member State						
<i>Both</i>	Training providers are approved by an authoritative body or have received formal recognition of Member State						
<i>Both</i>	Training providers sign a contract/convention with the awarding body						
	<b>2. Institution</b>						
<i>Both</i>	<u>Training is provided by :</u>						
	<ul style="list-style-type: none"> <li>• training institutions (providing general training or specialized training in the relevant field)</li> </ul>						
	<ul style="list-style-type: none"> <li>• manufacturers</li> </ul>						
	<ul style="list-style-type: none"> <li>• federations</li> </ul>						

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<ul style="list-style-type: none"> <li>guilds</li> </ul>						
	<b>3. Technical</b>						
<i>Both</i>	Training standards are elaborated and updated by a working group of experts						
<i>Both</i>	<u>Training sessions have the following features :</u>						
	<ul style="list-style-type: none"> <li>Theoretical lessons</li> </ul>						
	<ul style="list-style-type: none"> <li>Theoretical exercises</li> </ul>						
	<ul style="list-style-type: none"> <li>Practical exercises</li> </ul>						
	<ul style="list-style-type: none"> <li>Final examination</li> </ul>						
<i>Both</i>	<u>Trainers must comply with the following requirements :</u>						
	<ul style="list-style-type: none"> <li>Follow a train-the-trainers session</li> </ul>						
	<ul style="list-style-type: none"> <li>Provide evidence of recent relevant experience</li> </ul>						

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
<i>Both</i>	Regular feedback from installation audits into training schemes (to promote best practices and warn against difficulties and bad practices)						
	<b>4. Financial</b>						
<i>Both</i>	Installers bear training costs						
<i>Both</i>	Training centres bear costs for technical equipment						
<i>Both</i>	Training centres pay fees to the awarding body						
	<b>5. Communication</b>						
<i>Both</i>	Short advertising documents to promote the role of training						
<i>Both</i>	Promotion on website						
<i>Both</i>	Communication with concerned stakeholders to promote RES training						

## Audit

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<b>1. Legal</b>						
<i>Both</i>	Administrative audits of installations are conducted						
<i>Both</i>	On-site audits of installations in operation are conducted						
<i>Both</i>	The audit body signs a contract/convention with the awarding body						
<i>Both</i>	The audit body is selected following a tender process						
<i>Both</i>	<u>Audits of the installer are based on the following criteria :</u>						
	<ul style="list-style-type: none"> <li>predefined number of installations to be audited over a certain period (e.g. one installation audited every year)</li> </ul>						
	<ul style="list-style-type: none"> <li>predefined frequency of systems installed (e.g. one audit every 100 installations)</li> </ul>						
	<ul style="list-style-type: none"> <li>the size of the company (based on the number of employees, turnover, ...)</li> </ul>						
<i>Both</i>	Audits results may lead to suspension of the certification or equivalent qualification of the installer						

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<b>2. Institution</b>						
<i>Both</i>	Audits are conducted by a third-party						
<i>Both</i>	The audit body is certified or accredited						
	<b>3. Technical</b>						
<i>Both</i>	Audits are conducted during the period of validity of certification or equivalent qualification						
<i>Both</i>	Audits are initiated following reports of complaints about installations						
<i>Both</i>	Audits are initiated based on random selection from installation references						
<i>Both</i>	Audit standards are elaborated and updated by a working group of experts						
	<b>4. Financial</b>						
<i>Both</i>	Installers bear audit costs						
<i>Both</i>	The awarding body bears audit costs						

Company, individual or both		Essential	Important	Not very important	Not important	No answer	COMMENTS
	<b>5. Communication</b>						
<i>Both</i>	Dissemination of short advertising documents to promote the role of audit						
<i>Both</i>	Promotion on website						
<i>Both</i>	Anonymous global results of audits are publicly available (e.g. number of non compliant installations)						
<i>Both</i>	<u>Audit results of an installation are communicated to :</u>						
	<ul style="list-style-type: none"> <li>The installer's client</li> </ul>						
	<ul style="list-style-type: none"> <li>Concerned stakeholders/partners</li> </ul>						

## GLOSSARY OF KEY-TERMS

The aim of this glossary is to provide general guidance about the key-terms related to certification or equivalent qualification as part of the QualiCert project. The following definitions are excerpted mainly from the *Glossary on the terminology of European education and training policy* published by Cedefop (European Centre for the Development of Vocational Training), from the *European Directive on the promotion of the use of energy from renewable sources*, from the *European Directive on the Recognition of Professional Qualifications* and from definitions provided by CEN (European Committee for Standardisation). These definitions have been adapted to comply with the scope of QualiCert project.

### **Accreditation of an awarding body**

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Procedure by which an authoritative body gives formal recognition that an awarding body is competent to issue qualifications (certificate, diploma, title or label).

### **Accreditation of an education or training programme**

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A process of quality assurance executed by an authoritative body through which accredited status is granted to a programme of education or training, which meets predetermined stringent and uniform standards.

### **Accreditation of an education or training provider**

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A process of quality assurance executed by an authoritative body through which accredited status is granted to an education or training provider, which meets predetermined stringent and uniform standards.

### **Assessment of learning outcomes**

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The process of appraising knowledge, skills and/or competences of an individual against predefined criteria (learning expectations, measurement of learning outcomes). Assessment is usually followed by validation of learning outcomes and/or certification.

### **Audit**

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Examination and verification of an installer's knowledge, skills, and/or competences to install, maintain and troubleshoot a small-scale RE system. Different types of audits exist, such as administrative audits based on documents and administrative proofs submitted by the installer or on-site audits performed during the works or after the installation is achieved.

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**Awarding body**

A body issuing an official document (certificates, diplomas, titles or labels) formally recognising the knowledge, skills and/or competences of an installer, following an assessment and a validation procedure.

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**Certificate**

An official document, issued by an awarding body, which recognizes the achievements, knowledge, know-how, skills and/or competences of an installer following an assessment and validation against a predefined standard.

**Related terms:** label, diploma, title

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**Certification of learning outcomes**

The process of issuing a certificate, diploma or title formally attesting that a set of learning outcomes (knowledge, skills and/or competences) acquired by an individual have been assessed and validated by a competent body against a predefined standard.

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**Certification**

Procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements.

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**Curriculum**

The inventory of activities implemented to design, organise and plan an education or training action, including the definition of learning objectives, content, methods (including assessment) and material, as well as arrangements for training teachers and trainers.

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**Education or training programme**

An inventory of activities, content and/or methods implemented to achieve education or training objectives (acquiring knowledge, skills and/or competences), organized in a logical sequence over a specified period of time.

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**Education or training provider**

Any organisation or individual providing education or training services.

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**Examination**

Testing of an individual knowledge, skills and/or competences. A proof of successful examination is usually issued.

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### Installer

An individual who or an installation company which plans, installs, maintains and troubleshoots a small-scale RE system.

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### Label

A recognizable quality brand, issued by an awarding body, which recognizes a set of criteria implemented by a company, following an assessment and a validation procedure.

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### Learning outcomes

The set of knowledge, skills and/or competences an individual has acquired and/or is able to demonstrate after completion of a learning process.

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### Qualification

The formal outcome (certificate, diploma, title or label) of an assessment and validation process which is obtained when a competent body determines that an installer has achieved learning outcomes to given standards and/or possesses the necessary competence to do a job in a specific area of work. A qualification confers official recognition of the value of learning outcomes in the labour market and in education and training.

*The above-cited definition is “formal qualification”, to which we refer to in the context of a Quality scheme designed for “certification or equivalent qualification of an installer”.*

The term qualification can also be defined as:

- Professional qualification: professional experience achieved either through a training course not forming part of a certificate or diploma, or through full-time pursuit of the profession for three consecutive years or for an equivalent duration on a part time basis during the previous 10 years.
- Skills requirements: the knowledge, aptitudes and skills required to perform the specific tasks attached to a particular work position (ILO).

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### Quality scheme

A scheme describing the necessary steps to ensure the overall quality of small-scale RE installations, the qualification process being a part of it.

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### Qualification process

A process encompassing the different stages of vocational training and qualification of an installer, leading to the attestation that an installer has demonstrated the necessary knowledge, skills and competences required to plan, install, maintain and troubleshoot a small-scale RE system.

### **Technical referent**

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In case of certification or equivalent qualification of a company, the company has to appoint at least one technical referent among its staff. The technical referent is an individual with adequate knowledge, skills and/or competences required according to the Quality scheme.

### **Validation**

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Confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled (ISO 9000:2005 3.8.5).