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Regulation of the validation system for technical knowledge and skills in sustainable construction



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PARTNERSHIP:

- Fundación Laboral de la Construcción
- Instituto de Ciencias de la Construcción Eduardo Torroja (CSIC)
- Fundación Estatal para la Formación en el Empleo (Fundae)
- Instituto Nacional de las Cualificaciones Profesionales (Incial),
Ministerio de Educación, Cultura y Deporte
- Centro de Investigación de Recursos y Consumos Energéticos (Circe)
- Institut de Robòtica i de Tecnologies de la Informació i de les Comunicacions (Irtic), Universidad de Valencia

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Preamble

The system of validation of technical knowledge in sustainable construction was born as a proposal to provide a tool to recognise the training of its workers in sustainable construction, regardless of how they have acquired it; either through training actions or through their work experience in the development of their professional activity.

It is a validation system within the framework of the European project Construye 2020+, financed by the Horizon 2020 Programme, agreement number 785019. The project partners are the following:

- Fundación Laboral de la Construcción
- Instituto de Ciencias de la Construcción Eduardo Torroja
- Fundación Estatal para la Formación en el Empleo
- Instituto Nacional de las Cualificaciones
- Centro de Investigación de Recursos y Consumos Energéticos
- Institut de Robòtica i de Tecnologies de la Informació i de les Comunicacions

Both the validation system and the technical knowledge and skills associated to the different Green Tags are equally circumscribed to the learning outcomes established in the eight training programmes developed in Construye 2020+.

The validation of competences in sustainable construction is structured in three categories or levels: basic, intermediate or specialised and is materialised in the awarding of an Green Tag for each of the categories.

Depending on the competences acquired and demonstrated by the candidate, the scope of the validation of technical knowledge in sustainable construction will be as follows:



The validation system has tests and criteria agreed upon by the Consortium, with the possibility of registering the different Green Tags on the Professional Construction Card, if the worker is in possession of one.

With the collaborative work of all the partners, the aim of the system is to provide the sector with an instrument that gives added value to the skills acquired in the so-called non-formal context, as a lever in the visibility of those people who choose to become qualified, which will benefit both companies and workers who are aware of the environmental focus of the construction sector.

This Regulation develops the procedure for the validation system of knowledge and technical skills in sustainable construction and the consequent awarding of the eco label.

Article 1. Target group

All workers, both employed and self-employed, employed or unemployed, who have at least six months' experience in the construction sector.

Article 2. Conditions of Access

Workers, employed or unemployed, who wish to access this validation system must meet the following requirements:

- a) To be Spanish nationals, to have obtained the certificate of registration of Community citizenship or the family card of a citizen of the Union, or to hold a valid residence or residence and work permit in Spain, under the terms established in the Spanish regulations on foreigners and immigration.
- b) Be 18 years of age at the time of registration.
- c) Possess professional experience of:
 - Basic technical knowledge in sustainable construction (Basic Green Tag): 6 months full-time or equivalent.
 - Intermediate technical knowledge in sustainable construction (eco label intermediate): 24 months full time or equivalent.
 - Advanced technical knowledge and skills in sustainable construction (eco advanced badge): 24 months full-time or equivalent.

In addition, at least one of the following requirements must be met:

1. Have passed the specific classroom training for each Green Tag
 - Basic technical knowledge in sustainable construction (Basic Green Tag): Energy efficiency course for operators (8 hours).
 - Intermediate technical knowledge in sustainable construction (intermediate Green Tag): Energy efficiency course for middle management (8 hours).
 - Advanced technical knowledge and skills in sustainable construction (Advanced Green Tag): Any of the following courses will lead to the Green Tag:
 - Basic technical knowledge in sustainable construction (Basic Green Tag): Energy efficiency course for operators (8 hours).
 - Intermediate technical knowledge in sustainable construction (intermediate Green Tag): Energy efficiency course for middle management (8 hours).
 - Advanced technical knowledge and skills in sustainable construction (Advanced Green Tag): Any of the following courses will lead to the Green Tag.
2. Have passed the theoretical or theoretical/practical tests to validate professional experience.

Article 3. Application for enrolment

The application for participation in the courses can be processed at any centre of Fundación Laboral de la Construcción and Centro de Investigación de Recursos y Consumos Energéticos that has launched a call for applications, through the usual channels already established by them for the registration of their courses.

Those interested in participating in the process of validation of professional experience in sustainable construction must go to any centre of Fundación Laboral de la Construcción having opened a call for applications and fill in the Application Form included in Annex I of these regulations, as well as pay the fee established in each case.

Article 4. Documentation

The application for registration, both for training courses and to validate experience, must be accompanied, in all cases, by the following documentation:

1. Original or certified photocopy of the National Identity Document or Foreigner's Identity Number, or certificate of registration of Community citizenship or family card of a citizen of the Union or hold a valid residence or residence and work permit in Spain, under the terms established in the Spanish regulations on foreigners and immigration.
2. In the case of validation of experience, signed authorisation for the recording of the practical assessment test in accordance with Annex II.
3. Documentation relating to the candidate's qualifications, either through professional experience or training received:
 - Professional experience: creditable through any of the following documents:
 - relevant working life for the learning outcomes related to the Green Tags
 - work contracts relevant to the learning outcomes related to the Green Tags
 - company certificates
 - registration as self-employed in the IAE
 - Related training: it must be demonstrated by original or certified photocopy of the diplomas corresponding to any of the eight courses developed in the Construye 2020+ project (satisfactory evaluation).
4. Proof of payment of the price established by FLC for the certification.

Additionally, on a voluntary basis, the candidate may provide any other documentary evidence that may be valued as evidence of experience in sustainable construction.

Article 5. Admission

For those applying for the Green Tag through training, both FLC and CIRCE must check that they have complied with their own course registration requirements, paying special attention to the compulsory documentation described in article 4.

1. Fundación Laboral shall specifically communicate the place, date and time of the theoretical or theoretical-practical tests to be taken.
2. The theoretical test will be given to all candidates simultaneously in the same classroom, under the supervision of a technician from Fundación Laboral.
3. For the practical test, each participant will be called individually or in pairs. During the practical test, only the participant and FLC staff may be in the designated area. The rest of the participants must remain in the facilities of FLC, or in an area that prevents them from observing the development of the test.

The process of validation of knowledge and skills in sustainable construction, which culminates in the award of the Green Tag, begins with the validation of the necessary documentation provided (ID card, work experience).

Article 6. Obtaining the Green Tag through the validation of training

Once this initial verification has been carried out, the courses and therefore the awarding of the Green Tag will be passed in the following way:

1. Basic technical knowledge in sustainable construction

At the end of the course, there will be a questionnaire of 10 multiple-choice questions. The evaluation will be individual. Each correct answer will be marked with a value of 1 point for a maximum grade of 10 points, where incorrect answers will be marked with a value of 0.

To pass the course with flying colours, all the following conditions must be fulfilled:

- Attend 75% of the hours of the course.
- Obtain a grade of PASS in the final test. A score of 5 or higher will be required in the test to be taken.

2. Intermediate technical knowledge in sustainable construction.

At the end of the course, there will be a questionnaire of 10 multiple-choice questions. The evaluation will be individual. Each correct answer will be marked with a value of 1 point for a maximum grade of 10 points, where incorrect answers will be marked with a value of 0.

To pass the course with flying colours, all the following conditions must be fulfilled:

- Attend 75% of the hours of the course.
- Obtain a grade of PASS in the final test. A score of 5 or higher will be required in the test to be taken.

3. Advanced technical knowledge and skills in sustainable construction:

In order to pass any of these courses, students must pass each of the blocks with the minimum grade set out below:

- Theoretical exam, a test with 20 questions on the theoretical blocks addressed in the didactic units, except in the course on Profitability of energy efficiency in buildings, where the number of questions will be 10.

To pass this exam, a minimum of 60% of correct answers of the totality of the questionnaire must be reached (12, in the case of the Profitability course there are 6).

- Practical exam “Crea” (on-line exercises): Practical Exercises. It is compulsory to complete the “Crea” activities of those didactic units that include this section and to achieve a minimum score of 6.

The teacher will communicate the evaluation criteria during the course

- Practical exam The “In-class” block (classroom training) includes: Classroom exercises. In accordance with the course programme, students must attend the training centre to carry out practical work associated with the theoretical content of the course.

These exercises will be assessed by the teacher using an observation grid, informing the students of the assessment criteria. The minimum score to pass this block will be a 7.

Article 7. Obtaining the Green Tag through validation of experience

The process will begin with the registration of the candidate to the specific call published by Fundación Laboral, where they will apply to participate in the system of validation of professional experience corresponding to the category they consider. During the registration phase, they will provide documentation relating to their qualifications (employment history, contracts, company certificate, self-employed registration...), justifying a minimum of experience in the sector of:

- Basic technical knowledge in sustainable construction: 6 months.
- Intermediate technical knowledge in sustainable construction: 2 years.
- Advanced technical knowledge and skills in sustainable construction: 2 years.

Subsequently, the evaluation phase will begin where the candidate will have to carry out a series of theoretical-practical tests that endorse the required knowledge and skills, accompanied by a personal interview that will allow further evidence to be gathered about their professional competences.

The evaluation method for obtaining the eco label is as follows:

To obtain the Green Tag it will be necessary to pass the theoretical-practical tests that demonstrate that the candidate possesses the technical knowledge included in the learning outcomes defined in the courses. If they are only partially demonstrated, the evaluation report will be negative, and the courses will be recommended. A personal interview will also be required.

Depending on the category chosen, the theoretical and practical tests are structured as follows:

- Basic technical knowledge in sustainable construction: theoretical test of 30 questions that assesses learning related to energy efficiency in the building and the influence of the tasks of their activity on the energy performance of the building.

It shall last 45 minutes and a score of at least 70% shall be obtained.

- Intermediate technical knowledge in sustainable construction: theoretical test of 30 questions that assesses learning related to the influence of the work units to be executed on the energy performance of buildings and the identification of execution errors, especially those critical elements such as thermal bridges or installations.

The duration of the test will be 45 minutes and a score of at least 70% must be obtained.

- Advanced technical knowledge and skills in sustainable construction: a theoretical test of 20 questions lasting 30 minutes and two practical tests, which assess the technical knowledge and skills required in the selected subject (insulation, windows, heating installations, geothermal energy, etc.). The theoretical part must pass 60% and the practical part 70%.

Finally, in the diagnostic phase, a final report will be issued, which will be expressed in terms of Pass/Fail and may be accompanied by recommendations if the assessor considers them necessary regarding training possibilities.

Article 8. Issuing of the Green Tag

All those obtaining the qualification of Suitable shall be entitled to an accreditation document standardised for the whole of the national territory:

1. The candidate will receive the Green Tag in paper format, which will be issued in two formats:
 - Diploma associated with the Construye 2020+ courses.
 - Certificate issued through the experience validation procedure.
2. Upon request of the candidate, the eco label will be included in the file of the Professional Construction Card.

The language of the eco label shall be Spanish. The printed accreditation document shall be issued in that language as well. At the request of the interested party, it may also be issued in any other co-official language of the Spanish state.

Article 9. Expiry date

The Green Tag has no expiry date. However, with regard to its registration through the Professional Construction Card, the guidelines for its updating in accordance with the regulations governing it shall apply.

Article 10. Candidate's rights

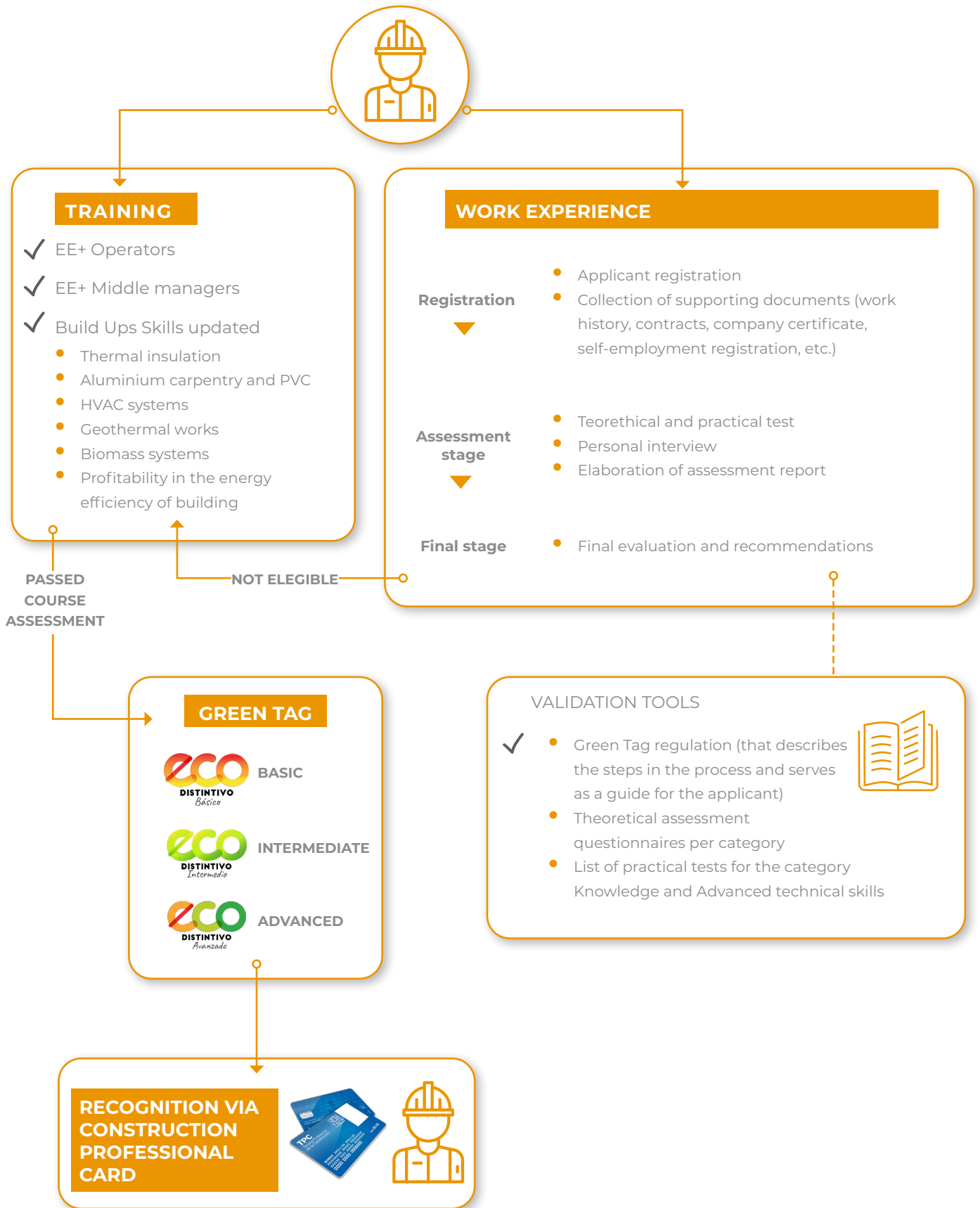
Candidates will be entitled to:

- To be guaranteed confidentiality and protection, both of their personal data and of the results of the evaluation process.
- To be evaluated through a transparent, objective, reliable and valid evaluation process, according to the criteria established in the Construye 2020+ project.
- To be informed of the results of the evaluation, its effects and possible recommendations.
- Receive, where appropriate, the corresponding Green Tag.
- Request a review, in case of disagreement.

Article 11. Candidate's obligations

The candidates, in turn, will have the obligation to:

- To fill in and sign correctly the registration form for the Construye 2020+ courses or the Application for registration shown in Annex I.
- If applicable, complete and sign the Authorisation for the recording of the Green Tag process shown in Annex II.
- Pay the costs, in the case of the validation process of the experience.
- To provide all the documentation that is compulsorily requested for their participation in the process of obtaining the Green Tag.
- To always comply with the instructions of the examiners to facilitate the evaluation process.



Coordinador del proyecto



Fundación Laboral de la Construcción

Socios



Instituto de Ciencias de la Construcción
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Fundación Estatal
PARA LA FORMACIÓN EN EL EMPLEO



Fundación Estatal para la Formación en el
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