R3FRAME

Circular Economy strategy FRAMEwork for sustainable SMEs

Circular Economy Self-Rate Tool Technical Specification Report

Disclaimer:

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Contents

1 List of Abbreviations

CBM	Company Business Model
CE S-R Tool	Circular Economy Self-Rate Tool
S-R Tool	Self-Rate Tool

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2 Introduction

This Technical Specification Report specifies the requirements of the Circular Economy Self-Rate Tool (CE S-R Tool), an online assessment tool of the REFRAME project. It will serve as the first step of the CE REFRAME process.

The CE S-R Tool will be an interactive, user-friendly, self-rating tool aimed at representatives and experts working in manufacturing, craft and construction SMEs and micro-enterprises.

The role of the CE S-R Tool is to help the above-mentioned users to recognise their company's and their staff's strengths, weaknesses, and the areas they may need a greater focus on.

This report is detailing the technical design and approach and aims to ensure that the CE S-R Tool structure, approach and applied tools correspond with the project target groups' needs.

3 Online presence

The CE S-R Tool will be part of the IO4: REFRAME iLearn Tool) and will be the first step/action a user should implement to start the CE REFRAME process.

- It will be directly connected with the project's website www.reframe-project.eu
- It will be part of the iLearn Tool (IO4), which will be hosted on: ilearn.reframe-project.eu
- The result will redirect the user to the IO2: Circular Economy Experts Course (CE Course) and to the IO3: Circular Economy Implementation Framework (CE Framework).

4 Graphical and Technical-related Issues of the Tool

4.1 Graphic Design

The CE S-R Tool will be designed according to the following features:

- It will be of high **quality** and professional design, in order to motivate the user and support him/her when accessing either the online environment, e.g. creation of orientation guides, processing scale, animation etc.
- It will comply with the **Erasmus+ visualisation standards**: https://wayback.archive-it.org/12090/20210122003258mp_/https://eacea.ec.europa.eu/about-eacea/visual-identity-and-logos-eacea/erasmus-visual-identity-and-logos_en
- **Navigation**: It is particularly important to create a navigational system that is available on every page, maintains the overall feel of the site while making the user and easy to locate data and information.
- **Colours**: The design will be built around a coordinated colour palette, which will contain the main colours of the project visual identity, plus 2 more colours maximum, where necessary.

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This way, the tool will have the professional yet simple look, while maintaining the cohesiveness of the website.

- **Fonts**: The fonts' family, size and colour combinations maintain a professional and cohesive feel. The fonts that will be used are Open Sans or Calibri Regular.
- **Layout**: The design will be determined based on the content that will appear in the CE S-R Tool, to ensure its usefulness and readability. Certain elements will need to be highlighted more than others.

4.2 Technical features

What a student can see, while accessing the CE S-R Tool, is a simply structured but very well designed, immediate, understandable, and efficient user interface.

- Simple, lightweight, efficient, compatible, low-tech browser interface.
- Emphasis will be given on strong security throughout. Forms will all be checked, data will be validated, cookies will be encrypted etc.
- Modules and plug-ins will be the backbone of the CE S-R Tool.
- Learners will be able to access the CE S-R Tool using all common browser, including Internet Explorer, Mozilla, Firefox, and Safari for the MacOS.
- The CE S-R Tool will have user accessibility features.

4.3 Languages

- The CE S-R Tool will be implemented in 5 different instances, one for each EU language: English, Bulgarian, Greek, Hungarian, and Portuguese.
- The addition of other languages is technically guaranteed.

4.4 Access

The user/visitor is not obligated to create a New Account, before accessing the CE S-R Tool. The tool will be accessible by any visitor. The results of the CE S-R Tool will not be stored into a personal account but will be downloadable locally.

4.5 Installation & Operability

- The CE S-R Tool will be directly connected with the project's website www.reframe-project.eu.
- The tool will be installed and hosted on an outsourced webserver in Europe.

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- First, a beta version will be released, and after the test phase, the final version of the will be released.
- During Beta version and the test phase the access to the content of the CE S-R Tool will be limited.
- Migration to other servers will be possible but with specific requirements.
- The CE S-R Tool will be designed and programmed in a responsive way, allowing proper operation on various mobile devices and on various common web browsers.
- The CE S-R Tool will be part of the overall project website's Google Analytics Tool. Various reports will be available for the partners with Google Analytics.
- PCX will design, develop, and write code following best practices for an accessible website and tool, without losing flexibility and attractiveness.
- PCX will work and implement the software according to EACEA rules and policies provided here: https://wayback.archive-it.org/12090/20210122003258mp_/https://eacea.ec.europa.eu/about-eacea/visual-identity-and-logos-eacea/erasmus-visual-identity-and-logos_en.

5 The CE S-R Tool structure

The structure of the S-R Tool will be as follows:

1. Short introduction - purpose and methodology of the tool.
2. Company industry selection: Construction, Manufacturing, Crafts.
3. Evaluation questions for the Company.
4. Evaluation – rating (score) for the Company Circular Level.
5. Action Plan (recommended steps) for the Company.
6. Choice for continuing to the staff evaluation or not (following the industry selection: Construction, Manufacturing, Crafts.
7. Evaluation questions for the staff.
8. Evaluation – rating (score) for the user.
9. Learning path for the user and redirection to specific training modules.

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5.1 Short Indtroduction

The first page of the tool will give to the user a short introduction for the S-R Tool, its use and objectives and procedure that the user will follow. The introduction will include text, images, and explanatory diagrams if necessary.

5.2 Company industry selection: Construction, Manufacturing or Crafts

The first step of the evaluation process will be the **Evaluation of the Company**; the current Circular Economy Level of the Company.

The user should first declare the company's business nature.

The person that answers the questions on behalf of the company should **choose between 3 main company categories**:

1. Construction
2. Manufacturing
3. Crafts

Depending on the choice, the relevant questions will be displayed.

5.3 Evaluation questions for the Company

The questions will be divided into **5 Categories (5 Business Models)** as follows:

1. CBM1 - Circular Supplies
2. CBM2 - Resource Recovery
3. CBM3 - Product Life Extension
4. CBM4 - Sharing Platforms
5. CBM5 - Product as a service

All the questions will have the same form. They are going to be statements for which the user will choose the following:

- Disagree
- Agree or
- Declare not applicable

Each answer will correspond to points as follows:

- Disagree: 1 point
- Agree: 2 points
- Declare not applicable: 0 points

The result will be from 0% to 100%.

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If a company achieves **0% for a CBM**, this will mean that the whole CBM is not applicable for this company.
If a company achieves **95%-100% for a CBM**, this will mean that the company needs no more actions to improve this specific CBM.
In any other case, depending on the company's result (**1%-94%**), there will be specific suggested actions for the company. This Action Plan will be in a form of suggestions and plans. Each CBM will have a separate result (%) with the corresponding explanation and the necessary links. All the CBMs will be represented with a histogram chart. **The responsible person will confirm the actions that need to be followed and the actions that do not need to be followed, based on the suggested Action Plan and the company's needs.** For the convenience of the user, the Action Plan will have direct links to the IO3: Circular Economy Implementation Framework (CE Framework). Also, the Action Plan will be downloadable locally in a pdf form.

5.4 Evaluation questions for the Company's staff

The second step of the evaluation process will be the **Evaluation of the Company's staff**; the knowledge level of an employee.

This step will be optional and separate from the Company's Evaluation, in order the Company will be able to make the evaluation so many times as the employees are.

After the Company's evaluation is over, the user will be asked for evaluating a company's employee. If the answer is 'No', a message will inform the user for the possibility of visiting again the Staff Evaluation questionnaire. If the answer is 'Yes', the below process will follow.

The user should first declare the staff's position. The person(s) that answer(s) the questions is the interested staff, so he/she should choose between the two (2) following **main staff categories**:

1. Owner – Manager
2. Employee – Officer

All the questions will have the same form. They are going to be questions for which the user will:

- Yes
- No

Each answer will correspond to points as follows:

- Yes: 1 point
- No: 0 points

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The result will be from 0% to 100%.

If a user achieves **0%**, this will mean that this employee needs to start learning about the Circular Economy from the beginning.
If a user achieves **95%-100%** this will mean that this employee needs no more studying for improving knowledge and/or skills.
In any other case, depending on the company's result (**1%-94%**), there will be specific suggested Learning Path for the employee. The Learning Path will be in a form of suggested modules and resources to study. For the convenience of the user, the Learning Path will have direct links to the IO2: Circular Economy Experts Course (CE Course). Also, the Learning Path will be downloadable locally in a pdf form.

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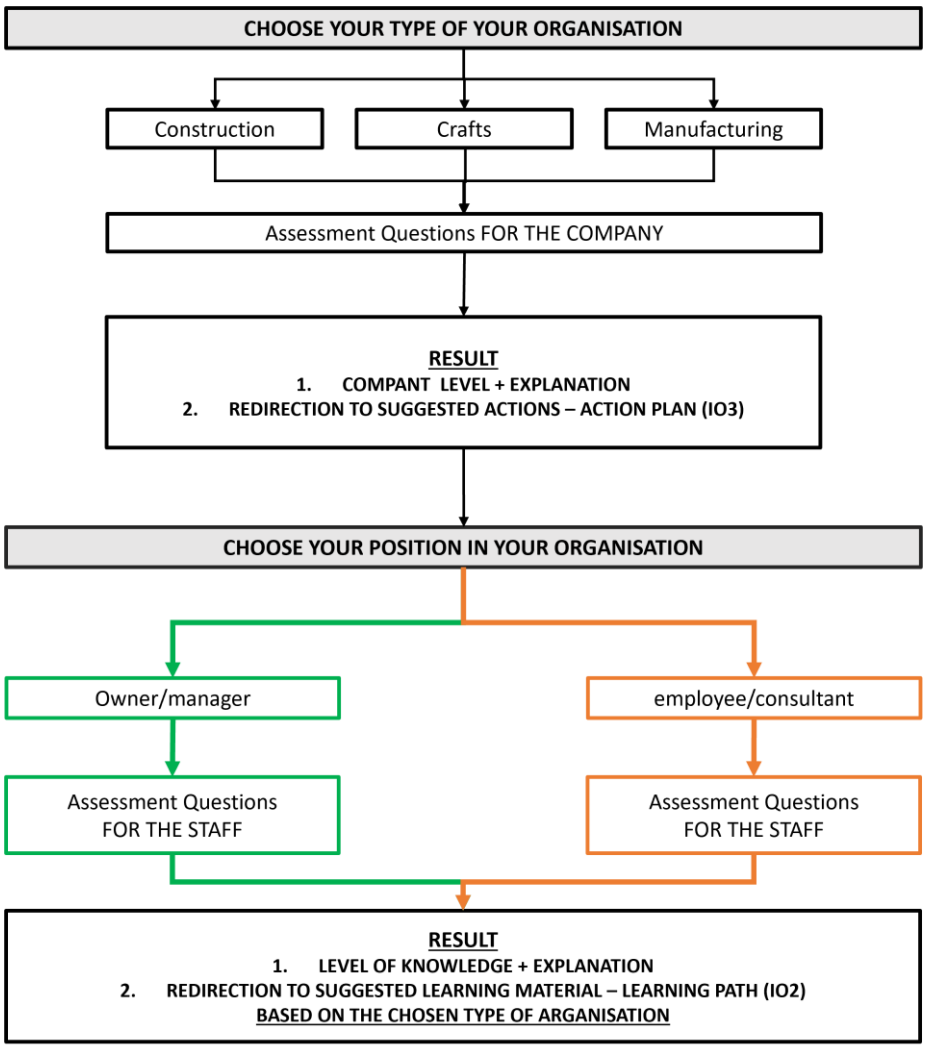
6 VISUAL representation of the S-R Tool



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7 Development Process

7.1 Phase 1: Strategy & Concept Development

Great design starts by understanding the project's objectives and target-groups. PCX will define any design problems and together with the partners will develop strategies for solving those problems effectively and memorably.

At this phase PCX will examine the details, ensuring that every element works to aid the communication objectives of the project. The architecture and the site map of the S-R Tool are completed. The CSS (Cascading Style Sheets) are flushed out and the GRCEssentials Learning platform is part of the project's website.

- Make the core installation of the necessary tools on the REFRAME Learning platform.
- Build the structure of the platform (pages, images, links etc.).
- Install & configure all the necessary plugins and make any code changes where necessary.
- Configure the registration system to be GDPR compliant.

7.2 Phase 2: Content insertion

At this phase PCX will upload the questions prepared by all partners in English. After this, PCX will create a new website skeleton for the national versions, to be ready to receive the translated texts. After that, the insertion of the questions in national languages will be implemented.

Final step for this phase is the initial check and feedback from all the partners to PCX, after the internal tests.

7.3 Phase 3: External tests and finalisation

At this phase, all the partners will conduct external tests, during which the final users will give feedback to the consortium regarding the S-R Tool design and content.

For the convenience of all partners PCX will create an online feedback form, which can be used to gather all the feedback submissions by all the users of all the partners.

Next, PCX will refine the design and content, check, doublecheck, proof again, and prepare the design for the final production environment.

- Testing of the Tool for selected browsers and mobile devices (iPhone Android, iPad etc.)
- Accessibility tests
- SEO set-up
- Fixing bugs
- Sign-off the S-R Tool development

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