E-ECO DOWNSTREAM

Development of Heating Technologies for the Efficient Renewable Energy Consumption of CO_2-Neutral Downstream-Processes

Quality Control Plan

Deliverable D7.3

Valentina Colla, Oliver Hatzfeld, Joel Falk, Jesse White

April 30, 2025

*This project has received funding from the European Union under grant agreement NUMBER — **101178210** — E-ECO Downstream*

Table of content

1. Introduction

1.1 Purpose and scope of the present document

The E-ECO Downstream consortium places a strong emphasis on quality control measures to ensure that this projects' outputs are meeting the highest standards, are presented clearly and are based on either own original work or are properly referenced. This report illustrates the practical implementation of E-ECO Downstream quality control and risk management measures. In this context, it includes the experience and lessons learned from previous research projects performed by the E-ECO Downstream consortium members.

The consortium has extensive experience in managing complex research projects for the European Commission. The internal processes have been designed so that there is a quality check performed by multiple senior experts at each relevant progression step of E-ECO Downstream and that any arising risk, even unforeseen ones, are faced in an effective and timely manner. These processes will be explained in detail in the present document. Additionally, the E-ECO Downstream governance structure as described in the Grant Agreement and the Consortium Agreement will ensure that the project work will meet the highest quality standards.

This Quality Assurance Plan was developed based on the plan established in the project "Green Steel for Europe" (Grant Agreement No 882151). It specifically covers the following items:

- scope of application;
- quality targets;
- quality assurance procedures, including
    - Risk Management
    - Documentary evidence
- quality checkpoints;
- personnel responsible for quality assurance.

1.2 Scope of application

This Quality Assurance Plan applies to any activity related to E-ECO Downstream. In this context, 'activity' relates to any work conducted between project start and end. Thus, it applies to a wide range from deliverable report preparation to subsequent quality control measures. In organizational regards, this Quality Assurance Plan covers all staff involved in the E-ECO Downstream project, including the staff deployed for the implementation of the project as well as any additionally deployed staff.

The main responsibility for the Quality Assurance Plan application lies with the Project Coordinator (CO), the Quality Manager (QM) and the Risk Manager (RM). Nonetheless each staff member is bound by this Quality Assurance Plan. Such as defined in the Project Management Plan (Deliverable D7.1), the appointed QM is Dr. Joel Falk from SWERIM, and the appointed RM is Dr. Jesse White from Kanthal (KAN).

1.3 Structure of the document

This document is divided into 7 main sections:

- Section 1 introduces the context of this document and its objectives.
- Section 2 introduces the main quality targets.
- Section 3 describes the quality assurance procedures
- Section 4 provides an updated overview of the identified risks and associated management and mitigation measures.
- Section 5 overviews the documentary evidence which has been set up for the project.
- Section 6 describes the quality checkpoints and procedures for project and deliverable reports.
- Section 7 provide a synthetic overview of the personnel responsible for quality assurance and risk management.

2. Quality targets

The E-ECO Downstream consortium sets highest quality demands to itself. Thus, it is making sure that the project outputs are meeting highest quality standards and are presented in a clear and focused manner. The outputs are based on own original work or properly referenced.

The implementation of this Quality Control and Risk Management Plan is showing the EC that all quality requirements for a highly satisfactory performance have been duly planned. The Quality Control and Risk Management Plan is a tool for deepening the trust between the E-ECO Downstream consortium and the European Commission (EC).

In this Quality Control and Risk Management Plan, the term ‘quality’ is interpreted in two ways: related to its ‘outputs’ (as e.g. deliverable reports) and to its ‘procedures’ (as e.g. project or contract management).

The definition of quality targets is the key pillar of the Consortium’s quality management. Only well-defined and measurable targets can lead the work to the set high level of quality. Table 1 provides a detailed quality assessment grid for project outputs based on the specific requirements and needs for E-ECO Downstream.

Regarding the quality of project procedures, all staff members employed in E-ECO Downstream are bound and explicitly committed to professional quality standards. They adhere to the rules and procedures as described in the proposal and Grant Agreement. Particularly, the Consortium Agreement as established between all consortium partners includes provisions on professional conduct, confidentiality and intellectual property. For internal evaluation, the consortium applies the principle of peer review. In this, a group of peers review any project or deliverable report before these are submitted or published. The peers may comment on and require revisions of the draft. The consortium follows this peer-review model to ensure the maximum quality of the projects’ output.

TABLE 1. QUALITY ASSESSMENT GRID.

Quality Criterion	Quality standards
Relevancy	• The project is structured to find answers to relevant research questions. • The project Deliverable reports describe the outcomes in sufficient detail, so that readers can recognize their relevance.
Project Design	• The methodological approach fits its purpose and takes into account all identified constraints. • The methodology includes an appropriate mix of approaches and tools. • These are described and documented clearly in each Deliverable report.
Data reliability	• The information used is documented in sufficient detail, including bibliography and annexes where relevant. • Any limitations affecting data reliability or validity are clearly described. • Confidentiality of sources is guaranteed, if required.
Analyses soundness	• Data are analysed by appropriate processes. • If statistical analyses are used, significance and validity of the results. are reported clearly. Confidence intervals are specified, if relevant.
Robustness	• Sources of uncertainty are well documented. If assumptions are required, this is clearly stated, and reasoning is explained in detail. • If there is substantial uncertainty, results are tested for their robustness by checking the influence of assumptions and/or uncertain variables. In these cases, ranges will be indicated.
Credibility	• The findings are based on a systematic and comprehensive review of the available evidence. • Data from different sources are verified (e.g. via triangulation), wherever possible, to produce credible findings.
Validity	• Conclusions are entirely based on the available evidence and research findings. The links between evidence and conclusions are clearly identifiable. • Conclusions are not biased in any direction. These are only based on a reasonable and credible interpretation of the evidence.
Helpfulness of recommendations	• Recommendations are clear, realistic, and applicable. • Implications (e.g., advantages and disadvantages) of different recommendations are clearly stated.
Clarity	• The project and deliverable reports are written in clear, accurate and unambiguous language. • The deliverables are well structured in a logical and reader-friendly way. Key messages are highlighted (e.g., in an executive summary and/or key findings section). • The length of the deliverables is proportionate to the scope of the relevant tasks. Non-essential elements are included in annexes.

3. Quality assurance procedures

Dedicated procedures have been developed and will be implemented to guarantee highest quality of E-ECO Downstream outputs and research procedures. These procedures consider various events that may occur during a research project.

3.1 Open communication

A major risk in performing an EU-funded research project lies in a deviating understanding of the project expectations and requirements. A mismanagement of these may lead to discrepancies that may furthermore lead to unsatisfactory project outcomes. To avoid this, the project Consortium seeks to maintain an ongoing open communication the EC via its CO. This is complemented by an open and transparent communication with the External Expert Advisory Board set up for E-ECO Downstream to continuously synchronize the project approaches with current industrial demands and research questions. With the three groups of the EC, the E-ECO Downstream consortium and the Advisory Board, a triple-checking of the understanding of expectations and requirements is guaranteed. This also allows for anticipating arising issues and challenges at the output delivery stage. The CO as well as all members of the Executive Board (see also Deliverable 7.1 – Project Management Plan) and General Assembly have experience in communicating with the EC and other EU institutions.

3.2 Editorial and linguistic quality

In projects that include partners across different Member States, experience has shown that issues regarding language transparency can arise. Most authors of project and deliverable reports will be non-native English speakers with different linguistic backgrounds. This may affect the style, nature and clarity of the language used in the reports. Therefore, the consortium acknowledges the requirement of a dedicated editorial and linguistic review before submission or publication of any report. This includes high-quality proofreading. Project and deliverable reports need to be concise and to the point, avoiding any repetition of contents. To meet these demands, the editorial work includes two stages. First, the text is edited to check for linguistic style as well as for logical inconsistencies or incomplete referencing. Once the substantive content of the text has been clarified, the final proofreading to check for errors in spelling and punctuation is taking place in a second stage. Issues identified and comments to be addressed will be noted and sent to the partner responsible for the project or deliverable report as well as to the CO and the QM (see also the detailed description of the procedure for Deliverable preparation that is provided in Section 6 of the present document).

Standard Microsoft Word® templates are prepared in the first months of the project. These will be compliant with the Commission’s visual identity, with automatic headings and paragraph styles. Final layout for all reports will be verified by the CO and the QM

3.3 Intellectual ownership and plagiarism

Plagiarism or the neglection of intellectual ownership is not accepted and will be addressed rigorously. If any improper referencing is detected, the QM will report to the CO. The corresponding authors of the draft will then be informed and assisted to undertake the required revisions und to use the proper referencing system.

3.4 Replacement of Team Members

In given circumstances, the replacement of a team member may be necessary. As soon as the CO is informed of the enduring unavailability of a senior team member, She will notify the EC within one week. In a transparent communication with the EC the further procedure will be elaborated. If the concerned task is at an advanced stage and the activities assigned to the senior team member to be replaced are relatively small or not specific, a possible option could be to hand over these activities to another senior team member with the same or superior professional profile.

3.5 Consortium Internal Management

Appropriate administrative procedures are essential to ensure the functioning of an efficient internal organization. Contractual matters regarding the project will be handled by the CO, assisted by the Executive Board, in line with the Consortium Agreement signed by all E-ECO Downstream partners.

4. Risk management

Risk management is an important pillar in the E-ECO Downstream project which defines how risks associated with the E-ECO Downstream project are identified, analysed, and managed. It outlines how risk management activities will be performed, recorded, and monitored throughout the duration of the project and provides templates and practices for recording and prioritizing risks.

The E-ECO Downstream quality assurance approach includes minimising disruptions and delays in project implementation. To account for these, the E-ECO Downstream consortium nominated a dedicated RM. This role has been covered since 01.12.2024 by MSc. Alice Petrucciani from SSSA and has been taken over since 14.04.2025 by Dr. Jesse White from _KAN. Every partner is responsible for applying risk management principles and the responsibility for each risk is well-defined. In particular, each risk is tracked, monitored, and handled with specific mitigation actions to reduce the risk impact. If the risk cannot be handled by the responsible partner, escalation to Project Manager and Project Coordinator is mandatory.

To be prepared for unforeseeable events, a dedicated risk management strategy will be implemented in E-ECO Downstream. It contains the following four steps:

1. **Communication.** Possible risks and delays are being communicated regularly during partner meetings and directly in between the meetings. The communication will be carried out according to the escalation scheme project partner → Work Package Leader (WPL) → CO → RM.
2. **Evaluation.** The risk severity and consequences for the project schedule, deliverables, and milestones are continuously evaluated.
3. **Mitigation.** Dedicated mitigation measures are developed. These include the expertise of the E-ECO Downstream consortium partners as well as their contacts to external experts. In case of occurring delays, the WP schedule will be adjusted and optimised to minimise the delays.
4. **Follow-up.** The progress of mitigation measures and interactions with other WPs and tasks is controlled.

Figure 1 summarizes the risk management strategy implemented in the project.

FIGURE 1. OVERVIEW OF THE RISK MANAGEMENT STRATEGY.

All partners are responsible for continuously identifying risk scenarios using all the project documents, discussions, and technologies, their technical expertise, and the project execution experience. This step will involve the identification of the impacts and the likelihood of occurrence, through the calculation of the risk level and prioritizing the risk for a response plan if the risk falls within the MEDIUM and CRITICAL zones. Risk monitoring will be performed by the coordinator and the partner responsible for the resolution action(s). This is a continuous process that will involve the project team and appropriate stakeholders. Careful attention will be given to the project's deliverables, assumptions, constraints, cost/effort estimates, resource plan, and other key project documents. Several risks have already been identified, and initial countermeasures have been defined.

All identified risks are evaluated and analysed to assess the range of possible outcomes and their probability. Risk analysis is performed when a risk is identified and categorized based on the agreed characteristics. However, risks are continuously monitored and tracked. The two main characteristics on which every risk is assessed are the *probability*, i.e., *likelihood*, and the foreseen consequences, i.e., *impact*.

Likelihood and impact are assessed by the involved partner(s) using the following classification:

4.1 Likelihood

- **High** – high probability of occurring (>70%);
- **Medium** – medium probability of occurring (30%< AND >70%);
- **Low** – low probability of occurring (<30%).

4.2 Impact

- **High** – Risk that has the potential to greatly impact project cost (>30%), project schedule (>6 months delay), or performance (>30%);
- **Medium** – Risk that has the potential to moderate impact project cost (>10% AND <30%), project schedule (>3 months delay AND <6 months delay), or performance (>5% AND <30%);
- **Low** – Risk that has relatively little impact on cost (<10%), schedule (<3 months delay) or performance (<5%).

The Qualitative Risk (Levels LOW, MEDIUM, HIGH, and CRITICAL) are derived from the matrix of likelihood and impact, as shown in Figure 2. Each risk is associated with a different color, respectively green, yellow, orange, and red. Risks that fall within the MEDIUM to CRITICAL zones will be prioritized for a response plan.

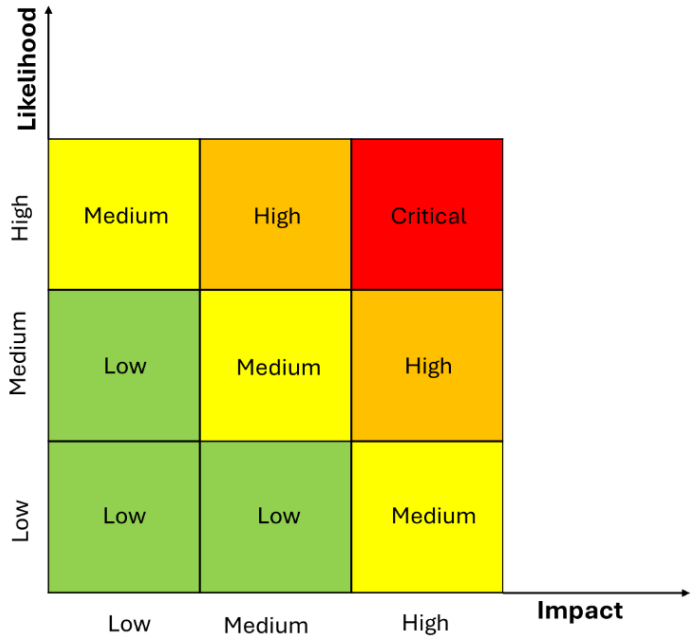

FIGURE 2. RISK LEVEL SCORE MATRIX.

The level of each risk will be tracked, monitored, and reported. The risk monitoring activities are performed by the coordinator and the partners responsible for the specific actions. All project change requests will be analyzed for their possible impact on the project risks. Each risk is monitored, with mitigation and resolution strategies carefully analyzed, documented, and implemented as necessary.

Existing and future mitigation solutions are considered, including measures to eliminate or reduce the risk and to provide support to the involved partners.

Risk strategies will be selected to address the identified risk:

- **Mitigate** – Identify ways to reduce or limit the likelihood and/or the impact of the risk.
- **Observe** – Monitoring the risk and other actions can be implemented.
- **Accept** – Nothing will be done. This approach is rejected if there are other possibilities.

Each risk is associated with a specific Work package (WP) or multiple Work Packages, and consequently, the responsible for the risk is identified as the WP Leader or one of the WP Leaders. The risk-responsible partner must monitor the identified risks and report their status to the coordinator. The risk-responsible partner is not necessarily required to implement resolution actions, but he must ensure that other partners have implemented the actions.

Each risk is identified and evaluated with its probability of happening (likelihood) and the impact it may have. To manage a risk, mitigation strategies can be used in the project. The best way to handle a risk is to minimize its likelihood, reducing its probability to happen near zero.

Disruptions or delays may occur due to foreseeable or unforeseeable events. A comprehensive list of foreseeable events as well as the proposed and planned contingency measures updated at the date of the present deliverable, is provided in Table 2. These events and proposed measures will be checked and updated continuously throughout the duration of the project.

TABLE 2. PROJECT RISK MATRIX.

Description of risk	Likelyhood	Severity	WPs involved	Proposed risk mitigation measures
Economic risk: Cost of components and materials, volatility of prices of natural resources, energy, goods, and products.	Medium	Low	1-4	An assessment of the life cycle costs of the technological solutions introduced by E-ECO Downstream will be carried out during the project, together with a market analysis, to verify the competitive positioning and the return on investment
Scalability in the industrial field of the proposal results on: › burners › heat recovery › hot charging › hybrid heating	Medium	High	1-4	Based on the limit conditions of the experimental burners and their comparison with the reference industrial burners (used during the simulations), a study will be carried out on the feasibility of alternative operating conditions that meet the industrial requirements and those of the new burners. As regards the hot charging and the heat recovery, the parts of the new layout solution (from the continuous casting to the hot rolling mill) will be analysed individually, trying to evaluate their scalability of the same taken individually. Also, for the hybrid heating, upscaling laboratory results will be used to search alternative industrial conditions different from those considered for hybrid heating that can guarantee its applicability at a higher scale.
1. Low savings obtained in heat recovery from sensible heat sources or low efficiency of considered recuperators and regenerators. 2. Secure burner and control equipment operation with preheated gases	Medium	1. Medium 2. High	2	1. Analyses of alternative sensible heat sources and changes of operating conditions and configurations of recuperators and regenerators. 2. Analyse and define measures for a secure operation of the burner itself, its equipment and furnace heating when preheating fuels and oxidizers (like air or oxygen enhanced air).
Materials chosen for additive manufacturing are not suitable for the manufacturing method or the manufactured burner parts and heat exchanger do not have the necessary specifications for their application the furnace heating process	Medium	High	1, 2	Analyses and selection of new materials of compositions to achieve the needed specifications of burner parts and heat exchangers.

Lack of available data or low-quality data for modelling and analyses tasks.	Medium	Medium	1-4	Literature data will be used, or extra tests and measurement campaigns will be organised. When possible, historical data will be used. Industrial partners will be guided in sharing needed data.
Low accuracy or robustness of developed models	Medium	Medium	1-4	Deepen the analyses of the modelled unit/process. Revise formulation or retuning of models. Reduction or change of assumptions. Collection of more data.
Pilot tests are delayed due to problems in delivery of hydrogen or supplies of essential installations	Medium	High	4	The time scheduling is set to have space for flexibility, which are not expected but can materialize
Unawareness of more advanced technologies and modelling/numeric techniques developed outside the project to solve similar problems.	Medium	Medium	1-4	The partners, all leading experts, continuously monitor the scientific area. They will try to locate and include the new techniques into the analysis whenever relevant and whenever timely with respect to the development of the project.
Partners do not deliver in time reports, cost statements, deliverables, etc.	Medium	High	All	Internal deadlines in advance to the official delivery deadlines, reminders well before the deadlines. In case of reiterated unresponsiveness of a partner the coordinator will decide what action to put in place, compatibly with the rules dictated by GA and CA.
Key persons leave the teams.	Medium	Medium	All	Plan for backup personnel and expertise. Regular documentation of progress and results.
Insufficient internal communication	Low	High	All	Roles and responsibilities clearly defined in meetings. Communication is ensured by regular meetings.
Budget deviations	Medium	Medium	All	Continuous cost monitoring and adaptation as soon as it arises
Weak industrial exploitation policy	Medium	Medium	5, 6	Definition of the MoU before the project beginning

5. Documentary Evidence

The consortium's quality assurance system relies on the traceability of information. Consortium members shall have traceability systems for documents in place. This ensures the capacity to retrieve specific information for the evaluation of outputs, procedures and events.

A project record will be created, including:

- Contractual documents: signed Grant Agreement, Consortium Agreement signed by all partners, amendments, call for proposal, submitted proposal, formal notifications, etc.
- Administrative documents: invoices, bank statement of account, timesheets, travel and subsistence receipts, etc.
- Project Management documents: relevant correspondence with the European Commission, meeting reports, etc.
- Reports and Presentations: draft and final versions of periodical project reports, draft and final versions of deliverable reports, presentation slides, etc.
- Data sources: background documents, literature referenced in the reports, transcription of interviews, survey raw data, databases, any other information and evidence used in the project.

Paper documents are stored for at least five years after the end of the project. Electronic documents are stored indefinitely on resident servers. Data are being encrypted if necessary. Period back-up of digital files is performed. Relevant information exchanged orally are transcribed as meeting reports.

6. Quality Checkpoints

Besides the upfront planning of the Quality and Risk Management, as described above, quality assurance and quality control are conducted and supervised continuously throughout the project duration. Quality checks are performed on an ongoing basis by the QM and the CO. Additionally, at dedicated 'quality checkpoints' the quality of project and deliverable reports and procedures is reviewed. The quality control measures foreseen are described in the following subsections

6.1 Verification of (draft) deliverables and interim reports

Against the background of quality control, special emphasis is given to the verification procedures of reports drafts and final versions. The first quality checkpoint for project or deliverable reports consists in sending the reports in draft form for quality check to the QM, the CO and the respective WPLs. This is to happen with sufficient advance to the report deadline. While the report is checked for quality, the consortium can work on the fine-tuning of the report in parallel, if necessary. This may include proofreading or finalization of the layout. The QM must be satisfied with the report quality or otherwise ask for a revision.

Therefore, the following specific procedure has been established for the preparation of the deliverables.

- Each deliverable tackles a specific subject and has an assigned Deliverable Leader (DL), who will coordinate the production of the specific interaction as necessary with the other partners involved.
- Before starting on its production, the DL defines the structure and the expected contributions from each partner in a preliminary document named Document Development Plan – according to a template which will be finalized together with the visual identity of the project and will propose the schedule for the development of the deliverable.
- Upon receiving the inputs from the different contributors, the DL merges them into a single document. This first draft will then be circulated for internal review and asked for further inputs. Each involved partner will check and provide their feedback. This iterative procedure will be repeated as necessary, until all involved partners give approval.
- The DL will then prepare a pre-final draft, which will be sent to the QM for peer review. The QM can decide, if needed, to involve partners not directly involved in the deliverable editing with the role of reviewers.
- Within up to 4 days, the identified reviewers will provide feedback and comments to the DL and may reiterate and re-circulate the deliverable report as required until the necessary quality level is attained.
- Once the QM has signed off the deliverable, the CO will transform the document in PDF and upload it onto the EU portal. The final version of the deliverables is also shared with the consortium through the project OneDrive folder.

Figure 3 summarizes the procedure to be followed for the preparation of deliverables:

For interim and final reports, a similar procedure is followed with the CO playing the role of DL.

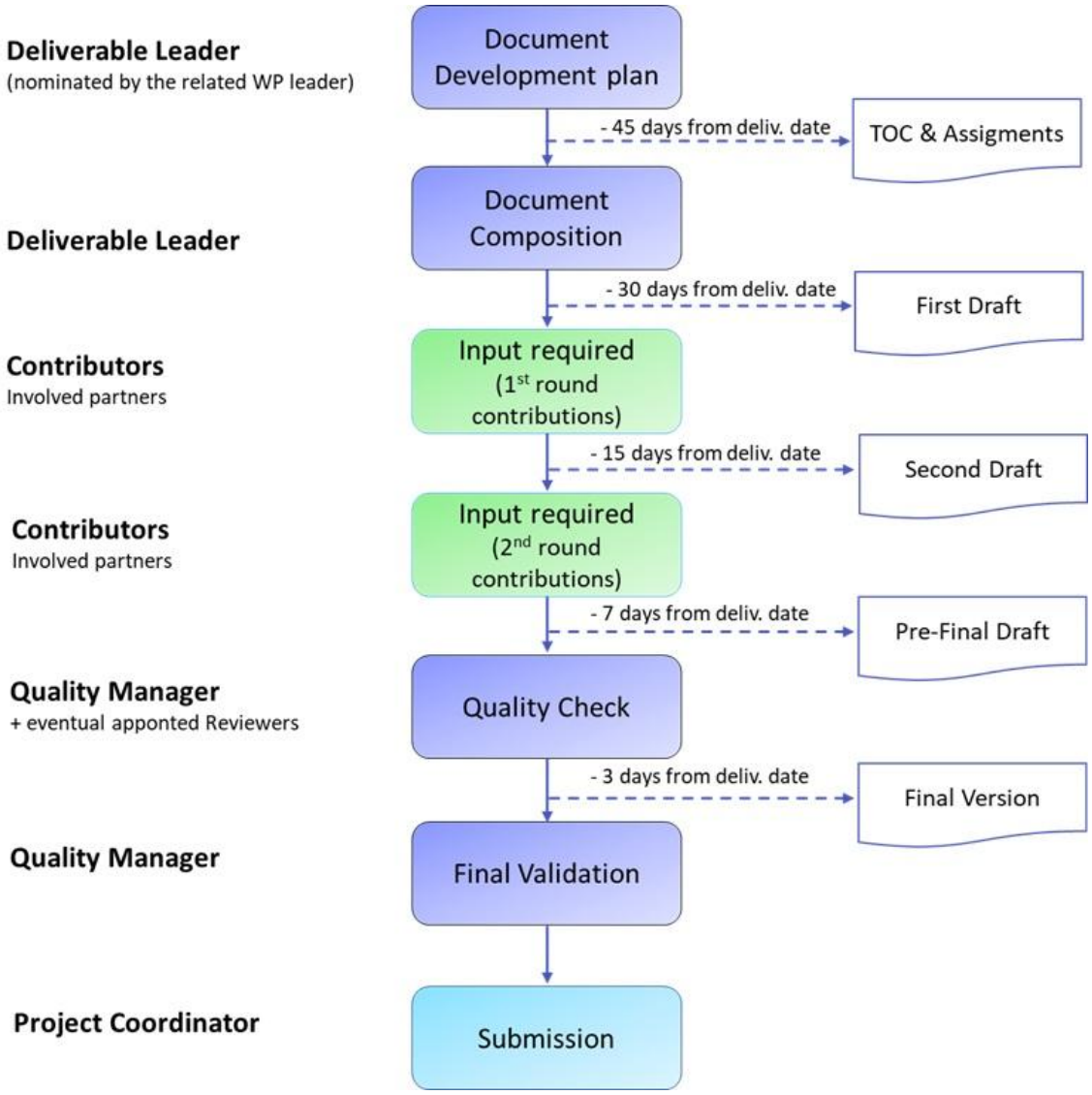

FIGURE 3. E-ECO DOWNSTREAM PROCEDURE FOR DELIVERABLES PREPARATION.

6.2 European Commission's feedback

The second quality checkpoint is reached once the EC's comments on project or deliverable reports are provided. After report submission, highest attention is dedicated to receiving relevant comments by the EC and subsequently implementing required changes, amendments or updates. The assessment of the comments is carried out by the CO with the support of the Technical Manager (TM).

6.3 Complaint Management System

The consortium implements a complaint management system at the disposal of the EC for the duration of the project. The CO is responsible for receiving and reviewing complaints and ensuring that these are addressed as soon as possible. The EC will be able to submit

complaints on any issue arising. This may consist of the quality of project or deliverable reports, timeliness, communication, relationship with EC services or other stakeholders, professional misbehaviour, conflict of interests, etc. The complaint procedure starts with a notification to the CO. She will get into contact to the EC without delay. Then the CO will consult the Executive Board within the following 48 hours with the appropriate measures to adopt. In case of a founded complaint, the possible measures may include deploying additional efforts such as execution of additional research, strengthening the research team by including additional senior members or the replacement of non-performing consortium member following the rules of the Consortium Agreement, if necessary. In any case, the contingency measure adopted needs to be confirmed by the EC.

7. Personnel responsible for quality assurance and risk management

The quality of the project procedures and outputs are checked constantly by the dedicated QM Dr. Joel Falk from SWERIM as well as multiple instances as the overall project Executive Board and corresponding Deliverable Leaders and WPLs.

Such as detailed in the Project Management Plan (Deliverable 7.1), the project Executive Board consists of the CO (Dr. Valentina Colla, SSSA), the Technical Manager (Dr. Oliver Hatzfeld from BFI), the Dissemination and Communication Manager (Dr. Ismael Matino from SSSA), the Quality Manager (Dr. Joel Falk from SWERIM), the Exploitation Manager (Dr. Zeinab Kargar from BFI) and the leaders of WP1 (MSc. Eng. Sebastian Bialek, BFI), WP2 (Dr. Piero Frittella, FERALPI), WP3 (MSc. Eng. Antonio Curci, ADI) WP4 (MSc. Eng. Andreas Johnsson, SWERIM) and WP5 (Dr. Frank Mintus, BFI). The roles are clearly coordinated, so that the joint effort of these instances will ensure the respect for quality standards.

The CO is responsible for the duly implementation of project activities. She ensures a timely execution of the work required for Deliverable preparation and creation. The primary task of the QM is to assess the quality of the work performed and of reporting. The QM verifies that the activities being performed, and the deliverables produced under a specific Task and WP are compliant with the applicable quality standards. The QM provides advice prior to the provision of each agreed Deliverable or report to the European Commission and periodically upon necessity. She works in close relation with the CO and the WPLs. The QM must be satisfied with the work and will otherwise ask for revisions.

The CO is responsible for the finalization of the Deliverables, and their presentation to the EC. CO and TM will provide the QM with the information needed and the Deliverables in draft form for quality check. The QM performs the quality checks of the contributions of team members with sufficient advance before the deadlines for the submission of a Deliverable. If needed, the QM sends feedback and recommendations, asking for necessary improvements or clarifications. The CO consults with the QM to ensure that the Deliverables meet the quality standards required. Furthermore, she will stay in regular contact with the EC to swiftly identify and address expectations and requests and assess satisfaction with the outputs produced

Table 3 summarizes the persons who are responsible for project management and WP leaderships and, as such, also have a role in quality and risk management and quality assurance, under the coordination of the QM and RM.

TABLE 3. MEMBERS OF THE PROJECT EXECUTIVE BOARD.

Role in the project	Name	Company/institution
Project Coordinator	Dr. Valentina Colla	SSSA
Technical Manager	Dr. Oliver Hatzfeld	BFI
Quality Manager	Dr. Joel Falk	SWERIM
Risk Manager	Dr. Jesse White	KAN
Dissemination & Communication Manager	Dr. Ismael Matino	SSSA
Exploitation Manager	Dr. Zeinab Kargar	BFI
WP1 Leader	MSc. Eng. Sebastian Bialek	BFI
WP2 Leader	Dr. Piero Frittella	FER
WP3 Leader	MSc. Eng. Antonio Curci	ADI
WP4 Leader	MSc. Eng. Andreas Johnsson	SWERIM
WP5 Leader	Dr. Frank Mintus	BFI

List of Figures

List of Tables

List of acronyms and abbreviations

Acronym	Full Name
ADI	Acciaierie D'Italia
BFI	VDEH-Betriebsforschungsinstitut
CO	Coordinator
DL	Deliverable Leader
EB	Executive Board
EC	European Commission
EM	Exploitation Manager
EU	European Union
FER	Feralpi
GA	General Assembly
KAN	Kanthal
QM	Quality Manager
RM	Risk Manager
SSSA	Scuola Superiore Sant'Anna
TM	Technical Manager
WP	Work Package
WPL	Work Package Leader