

D1.2: Quality and Risk Plan



COST REDUCTION AND MARKET ACCELERATION FOR VIABLE NEARLY ZERO-EN- ERGY BUILDINGS

Effective processes, robust solutions, new business models and reliable life cycle costs, supporting user engagement and investors' confidence towards net zero balance.

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D1.2: Quality and Risk Plan

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FOREWORD

This report is under the Work Package01 ‘Project management’, part of the Horizon2020 - CRAVEzero project.

Cost optimal and nearly zero energy performance levels are principles initiated by the European Union’s (EU) Energy Performance of Buildings Directive, which was recast in 2010. These will be major drivers in the construction sector in the next few years, because all new buildings in the EU from 2021 onwards are expected to be nearly zero energy buildings (nZEB).

While nZEB realized so far have clearly shown that the nearly-zero energy target can be achieved using existing technologies and practices, most experts agree that a broad-scale shift towards nearly-zero energy buildings requires significant adjustments to prevailing building market structures. Cost-effective integration of efficient solution sets and renewable energy systems, in a form that fits with the development, manufacturing and construction industry processes, as well as with planning, design, and procurement procedures, are the major challenges.

CRAVEzero will focus on proven and new approaches to reduce the costs of Nearly Zero Energy Buildings (nZEBs) at all stages of the life cycle. The main goal is to identify and eliminate the extra costs for nZEBs related to processes, technologies, building operation, and to promote innovative business models taking into account the cost-effectiveness for all the stakeholders.

Main project pillars will be: (i) CRAVEzero pinboard as a structured framework organizing all needed information and data to build an effective nZEB business model for low life-cycle costs (ii) reliable life-cycle cost databases with cost reduction potentials in processes and technologies (iii) methodologies, robust solutions and business models for low LCC nZEBs. Cost reductions will indeed cover all stages of the process, from urban planning, to building design, construction, as well as building operation, while ensuring a high overall quality of the building, considering in particular architecture and indoor environmental aspects.

CRAVEzero will transform the whole construction cycle (from the design to the end of life) into an organized process, where the building will acquire the features of a manufacturing product cutting off the uncertainties and failures during planning-construction-operation of the current practice and reducing the associated costs.

Guidelines, databases and case studies for cost reduction of nZEB technologies, processes and business models will be developed in close cooperation with the industry partners involved. Working methodologies, ready-to-be-used customisable solutions enabling cost reduction, speeding up the process and ensuring the high performance level of the new buildings, will be addressed.

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EXECUTIVE SUMMARY

This deliverable sets up routines for risk management and quality assurance within CRAVEzero, which are needed to ensure successful outcomes of the project. Risks at several levels may threaten CRAVEzero. The objective of this deliverable is to describe the risk management procedure for the project. The main aim of the active management of risks is to monitor their development and to be prepared for needed actions. Risks may be associated with the scientific level of the work, implementation risks

connected to the ability to implement what has been foreseen, exploitation risks like lack of uptake of project results, and managerial risks connected to internal accomplishment of work. An important part of the quality assurance is an internal reviewing procedure for scientific deliverables and an external quality assurance of implementations and the Advisory Board. The different steps of the reviewing procedure are described, and reviewing responsibilities are defined.

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1.INTRODUCTION

CRAVEzero will focus on proven and new approaches to reduce the costs of Nearly Zero Energy Buildings (nZEBs) at all stages of the life cycle. The main goal is to identify and eliminate the extra costs for nZEBs related to processes, technologies, building operation, and to promote innovative business models taking into account the cost-effectiveness for all the stakeholders. A successful outcome of the project depends on efficient management and continuous surveillance of quality and risks. This deliverable defines routines for risk management and quality assurance. Table 1 gives an overview of the roles of the project coordinator, work package leaders and all project partners within the topics:

- ① Risk management
- ② Quality of work
- ③ Data management
- ④ Intellectual property management

Table 1. Roles and responsibilities

TOPIC	PROJECT COORDINATOR (PC)	WORK PACKAGE LEADER (WPL)	PROJECT PARTNER (PP)
Risk management	Overall responsibility for monitoring.	Monitor risks related to own WP, manage risks in cooperation with PC.	Report potential risks to WPL and PC as soon as discovered.
Quality of work	Overall responsibility of the quality of work. Plan and manage internal reviewing system for deliverables.	Ensure that work is done as planned in Description of Action. Inform PC in the case of problems or deviations.	Perform work as planned in the Description of Action. Report progress to PC. Contribute to reviewing of deliverables.
Data management	Develop and manage a data management plan.	Ensure that data collected and used in own WP are managed in line with the data management plan.	Ensure that data are stored and used in line with the Data Management Plan.
Intellectual Property Management	Overall responsibility for IP issues. Involve Management Committee and General Assembly when needed. (see section 4.1)	Monitor intellectual Property issues specifically related to own WP. Contribute to overall management of IPR in Management Committee.	Follow rules as set out in Consortium Agreement. Report publications to all WPL

2.RISK MANAGEMENT

Several risks may threaten the project:

- Risk that planned activities cannot be implemented as foreseen
- Exploitation risks, lack of uptake of project results
- Risks associated with the scientific level of the work
- Managerial risks connected to internal accomplishment of work

2.1 RISK EVALUATION

Risks are evaluated in terms of probability of occurrence and consequence if the risk occurs, and the importance of a risk is typically calculated as the product of the probability and the consequence. One approach is to differentiate between Low, Medium and High probability of occurrence, and Low, Medium and High Consequence. Typical interpretations of these are presented in Table 3.

Table 2. Interpretation of Low, Medium and High probabilities and consequences of risks.

CATEGORY	PROBABILITY	CONSEQUENCE
Low	Typically below 25%	Easily recoverable
Medium	Between 25 % and 75%	Significant impact on cost, schedule or quality
High	Typically above 75%	Threatens the objectives of the project

A set of risks was identified, these are presented in Table 2 below.

Table 3. Critical risks for implementation

RISKS RELATED TO ADMINISTRATIVE AND COORDINATION ACTIVITIES

RISK	LEVEL	ACTION TO MIGRATE
Project estimations are not as accurate as expected.	m	Rework, check if reduced accuracy is acceptable to users, and to the project scope.
Delays or poor quality of the deliverables	l	In case that a key deliverable which is needed for the implementation of subsequent work is delayed, a provisional draft will be elaborated. This draft will gather the essential information needed for the performance of the work depending on it. Draft versions of most of the reports are foreseen. An internal review process, both of draft and final version of Deliverables, as well as internal thematic dedicated workshops among the partners will ensure effective exchanges, contributing to keep a high quality level.
Lack of resources Partner/ task/ WP	m	Resource expenditure will be carefully monitored throughout the project. If needed, resources will be redistributed effort among tasks/WPs/Partners. All participants are prepared to temporarily commit more resources to the project, if required.

Coordination, coherence and synchronisation of progress on Work packages. Conflicts. Milestone slippage. Budget overruns. Changes in personnel involved, consortium partnership	m	Clear management structure, detailed consortium agreement, sufficient quality management by WP leaders and periodical calls of the project Board (i.e. AEE_INTEC, eurac, Fraunhofer)
Withdrawal of members before its adhesion to the EC Contract	l	Likelihood is low since partners are really committed to the proposal and since all partners are already validated by the EC. If the event happens we will apply the procedure described in the EC guidelines for contract preparation in case of one potential contractor fails to adhere to the EC Contract: to reallocate the work formerly assigned to the missing contractor among the rest of partners, if possible, or to propose an external partner to the EC.
Lack of communication among partners	l	Project meetings and video conferences will be organized fostering active participation from all the partners to guarantee involvement in respective activities. Many communication media will be exploited to ease the dialogue between partners such as forum, mailing list, and sharing of common documents on private area of project website (cloud/sharepoint).

FINANCIAL RISKS (WP01)

RISK	LEVEL	ACTION TO MIGRATE
Administrative/financial information of one partner missing and blocking the EC payment	m	The coordinator will propose to the responsible partner not to present cost claims for the period, but to wait for the following period in order to declare all the cost. In this way, the whole consortium payments won't be blocked.
Bankruptcy of any partner	m	To apply the provisions of the Consortium Agreement for this case (generally this kind of situation is covered by bank guarantees). Amendment will be performed to introduce a new partner if needed or activities will be shared by other partners.

RISK RELATED TO TECHNOLOGICAL ACTIVITIES (ALL WPS)

RISK	LEVEL	ACTION TO MIGRATE
Results from functional/technical requirements too generic and heterogeneous to be useful to other WPs	m	Active dialogue with the stakeholders and strong collaboration step by step with industry partners ensure clear and tangible results as well as reliable and applicable solutions and strategies. Moreover, workshop with stakeholders will be organized to check results and for further inputs
Case studies deliver not the detailed information needed	h	The direct involvement of the companies that built the case studies will allow to fill the data gaps, by foreseeing additional efforts with the support of the research partners to deliver the needed data and information
Processes are too complex to generate useful information and outcome	h	The involved partners will filter and check for the most relevant processes to get viable results and statements. The project progress will be continuously assessed and, at specific points in time, decisions will be taken on potential fall-back strategies. The management structures will enable partners to follow the progress in the achievement of the challenging objectives.
Technologies and combination of these generate a huge possible matrix	l	The technologies can be clustered to consistent combination packages to ease and better quantify their use for NZEBs

Business models for all involved stakeholders difficult to describe	l	The partners will check for the most promising models for a quick dissemination. Intensive stakeholder discussions will help to define the more complex business models
Life cycle cost for all relevant steps and materials difficult to generate	m	Focus on good documented buildings, processes and materials to describe the cost related to the whole life-cycle

RISK RELATED TO IPR OR DISSEMINATION (WP08)

RISK	LEVEL	ACTION TO MIGRATE
Intellectual Property. Rights (IPR) conflicts	m	Consortium Agreement gives details on IPR conflict management. After the beginning of the project an exploitation plan will be prepared and shared among the partners to identify potential and optimal way to protect background and foreground for each partner.
Dissemination ineffective	l	Extend to wider auditorium if necessary and more focussed audience, different events, publications, etc. Improve the action. Exploit “Advisory Board (National Implementation Working Groups)” to obtain wider action.
Workshops, meetings training courses have not the foreseen participation	l	Thanks to Consortium Partners, call for participation for the activities will be prepared in due time. Consortium partners will motivate stakeholders for participation and support dissemination activities

For risks that have already been identified, measures that reduce the risk have been identified and planned. Several risks will remain threats throughout the project, this is unavoidable. The main aim of the active management of risks is to monitor their development and to be prepared for needed actions.

2.2 RISK MIGRATION AND MONITORING

For all identified risks, corrective measures have to be developed without unnecessary delay aiming at reducing the associated risks to an acceptable level. Such mitigating measures may be aimed at:

- ① Preventing the risks from occurring
- ② Reducing the consequences if the risks should occur
- ③ Reduce or remove risk by risk transfer (in terms of time, space or ownership)

For all risks, the risk owner has to be identified. The risk owner is the individual who is responsible for overseeing the risk. The status of the risk mitigation will be updated on a regular basis; this means that the risk mitigation is monitored. We distinguish between:

- ① Risks that are identified
- ② Risks for which corrective measures have been applied
- ③ Risks that are mitigated such that additional measures are not required

2.3 RESPONSIBILITIES

All partners are responsible for identifying risks throughout the project. If a partner identifies a risk threatening the project, he or she should report the risk to the relevant WP leader and the Project Coordinator. WP leaders have a particular responsibility for risk management related to the WP they are leading. Each WP Leader will inform the Project Coordinator about the appearance of a risk within his/her WP. They will together evaluate the risk and propose mitigating measures. Risk management will be an

item on the agenda in all meetings of the Management Committee. The WP Leader will also be responsible for the follow up of the mitigating measures, and for updating the status of the evaluated risk in the table.

The Project Coordinator will ensure that the measures are implemented. The Project Coordinator will also check that the measures are working correctly and that the risks are controlled and/or reduced

3.INTERNAL REVIEWING OF DELIVERABLES

The project uses an internal reviewing procedure for deliverables, where two project participants review each deliverable. The purpose of the review is to evaluate the:

- ① Technical approach adopted in the deliverable,
- ② Level of achievement with respect to the original objectives
- ③ Quality and relevance of the results illustrated
- ④ Clarity and quality of presentation, language and format

WP leaders are responsible for sending deliverables to the reviewers and Project Coordinator. When the partner responsible for the deliverable is different from the work package (WP) leader, the responsible partner has to send the draft final version to the WP leader in due time before the deadline for review.

Each deliverable will also be introduced by an executive summary explaining (in max 1 page) the specific problem addressed in the deliverable, the solution found/developed for this problem, what this enables you to do or know, the exploitable value of this outcome, by whom and under which conditions.

The reviewing procedure consists of the following steps:

- ① Each WP leader has to send the final version to the partners responsible for internal review (at least to AEE INTEC, EURAC, FRAUNHOFER ISE), at least 14 days prior to the submission deadline. The WP leader has to make sure that this deadline is also met in the case the responsible authors are different from the WP leader. The Project Coordinator will send a reminder prior to the reviewing deadline.
- ② The partner responsible for the deliverable has to take into account the comments from the reviewers and to contact the reviewer in case of doubts or the need for discussions. The final version of the deliverable has to be sent to the Project Coordinator two days prior to the final deadline.
- ③ The Project Coordinator will submit the deliverable within the final deadline. A copy of public deliverables will also be made available in the www.CRAVEzero.eu site when they are accepted by the European Commission.

Special arrangements can also be made when there are bank holidays or specific other issues that require a different schedule for the reviews. Such arrangements will be solved on a case- to-case basis.

If a deliverable is rejected by the European Commission, the authors have to modify the deliverable in order to close the gaps that have been identified. The original reviewing party will be consulted before re-submission of the deliverable.

In the case of disagreements or failures to meet deadlines, the Project Coordinator needs to be contacted immediately to mediate and resolve the issues, if necessary in line with procedures described in the Consortium Agreement. The partner responsible for the deliverable must inform the Project Coordinator if he expects that the deadline is not going to be met at least 1 month prior to the final deadline. The Project Coordinator will inform the EC Project Manager as soon as possible.

3.1 DELIVERABLES, DEADLINES AND REVIEWERS

Table 4 shows the allocation of reviewing responsibilities for scientific deadlines, as well as the deadlines for submitting deliverables to review. The table is based on information from the Description of Action valid from project start. If changes in deadlines occur throughout the project, Table 4 has to be updated accordingly.

NO	DELIVERABLE TITLE	WP NO	RESPONSIBLE PARTNER	DUE MONTH	REVIEWERS
D1.2	Quality and Risk Plan	WP1	1 - AEE INTEC	4	3 - Fraunhofer; 2 - EURAC
D8.1	Newsletter format	WP8	3 - Fraunhofer	4	1 - AEE INTEC; 2 - EURAC
D8.4	Data base of target group addresses	WP8	3 - Fraunhofer	4	1 - AEE INTEC; 2 - EURAC
D2.2	Report on the EU- implementation of NZEB	WP2	2 - EURAC	6	1 - AEE INTEC; 3 - Fraunhofer; Bouygues
D9.1	Requirement No. 1	WP9	1 - AEE INTEC	10	3 - Fraunhofer; 2 - EURAC

NO	DELIVERABLE TITLE	WP NO	RESPONSIBLE PARTNER	DUE MONTH	REVIEWERS
D1.4	1st Progress Report	WP1	1 - AEE INTEC	12	3 - Fraunhofer; 2 - EURAC
D2.1	Spreadsheet with LCCs - A database for benchmarking actual NZEB life cycle costs of the case studies	WP2	2 - EURAC	12	1 - AEE INTEC; 3 - Fraunhofer; K&M
D2.3	Structured repository of existing LCC calculation tools	WP2	2 - EURAC	12	1 - AEE INTEC; 3 - Fraunhofer; ATP SUSTAIN
D4.1	Guideline II: NZEB Technologies: Report on cost reduction potentials for technical NZEB solution sets	WP4	3 - Fraunhofer	12	1 - AEE INTEC; 3 - Fraunhofer; Bouygues
D5.1	Typology canvas of business models	WP5	3 - Fraunhofer	12	1 - AEE INTEC; 3 - Fraunhofer; Bouygues
D2.4	KPIs for performance-based characterisation of NZEB	WP2	2 - EURAC	18	1 - AEE INTEC; 3 - Fraunhofer; ATP SUSTAIN; Skanska
D3.1	Guideline I: NZEB Processes: Report on cost reduction potentials for the whole planning, construction and operation process	WP3	7 - ATP sustain	18	1 - AEE INTEC; 3 - Fraunhofer; 2 - EURAC
D5.2	Report describing NZEB business models	WP5	3 - Fraunhofer	18	1 - AEE INTEC; EURAC; Moretti; 3i; K&M
D6.1	Parametric models for buildings and building clusters: building features and boundaries	WP6	1 - AEE INTEC	18	3 - Fraunhofer; 2 - EURAC
D1.1	Project Management and Activity Report	WP1	1 - AEE INTEC	24	3 - Fraunhofer; 2 - EURAC
D3.2	Optimized NZEB-process map	WP3	7 - ATP sustain	24	1 - AEE INTEC; 3 - Fraunhofer; 2 - EURAC
D4.2	Optimized NZEB- solution sets	WP4	3 - Fraunhofer	24	1 - AEE INTEC; 2 - EURAC
D4.3	Energy flexible building managing models	WP4	3 - Fraunhofer	24	1 - AEE INTEC; 2 - EURAC

NO	DELIVERABLE TITLE	WP NO	RESPONSIBLE PARTNER	DUE MONTH	REVIEWERS
D5.3	Database of all fund services and business models	WP5	3 - Fraunhofer	24	1 - AEE INTEC; 2 - EURAC
D6.2	Results of optimized NZEB parametric models	WP6	1 - AEE INTEC	24	3 - Fraunhofer; 2 - EURAC
D1.5	2nd Progress Report	WP1	1 - AEE INTEC	27	3 - Fraunhofer; 2 - EURAC
D5.4	Guideline III: NZEB Business models	WP5	3 - Fraunhofer	28	1 - AEE INTEC; 2 - EURAC
D6.3	Report on NZEB life cycle costs	WP6	1 - AEE INTEC	30	3 - Fraunhofer; 2 - EURAC
D6.4	Framework for co-benefit analysis	WP6	1 - AEE INTEC	30	3 - Fraunhofer; 2 - EURAC
D7.1	CRAVEzero pinboard	WP7	2 - EURAC	30	1 - AEE INTEC; 3 - Fraunhofer
D7.2	Business model for prototypical implementation	WP7	2 - EURAC	30	1 - AEE INTEC; 3 - Fraunhofer; Morretti
D7.3	Measurement and verification protocol	WP7	2 - EURAC	30	1 - AEE INTEC; 3 - Fraunhofer
D7.4	Preparatory technical documents for the prototypes	WP7	2 - EURAC	30	1 - AEE INTEC; 3 - Fraunhofer; 3i
D1.3	Result-Oriented Concluding Reports	WP1	1 - AEE INTEC	36	3 - Fraunhofer; 2 - EURAC
D8.2	Feed other national and European NZEB project platforms	WP8	3 - Fraunhofer	36	1 - AEE INTEC; 2 - EURAC
D8.3	Formats for other dissemination activities	WP8	3 - Fraunhofer	36	2 - AEE INTEC; 2 - EURAC
D8.5	Nine news articles/newsletters about the results of the project – three each year	WP8	3 - Fraunhofer	36	3 - AEE INTEC; 2 - EURAC

NO	DELIVERABLE TITLE	WP NO	RESPONSIBLE PARTNER	DUE DATE	REVIEWERS
D8.6	Four newsletters in all project languages	WP8	3 - Fraunhofer	36	4 - AEE INTEC; 2 - EURAC
D8.7	presentation at the fair BAU 2019 and ISH2019	WP8	3 - Fraunhofer	36	5 - AEE INTEC; 2 - EURAC
D8.8	Twelve translated articles in local magazines and on local websites, one per year in each region.	WP8	3 - Fraunhofer	36	6 - AEE INTEC; 2 - EURAC
D8.9	Four regional symposiums	WP8	3 - Fraunhofer	36	7 - AEE INTEC; 2 - EURAC
D8.10	Four Online tutorials (Webinar) CRAVEzero pinboard	WP8	3 - Fraunhofer	36	8 - AEE INTEC; 2 - EURAC
D8.11	National strategies for the broad construction of NZEB implementing the CRAVEzero approach	WP8	3 - Fraunhofer	36	9 - AEE INTEC; 2 - EURAC

3.2 DOCUMENT NAMING

Documents are shared between CRAVEzero participants in an internal Webspacesite made available by AEE INTEC or Fraunhofer ISE (decision will be made till 01/2018). In order to ensure a reliable system for tracing of documents and their different versions, a document naming system is introduced.

Documents will be named as it is indicated below:

CRAVEzero_<document name>_<version>-<revision>_<company>.extension

For deliverable the deliverable number (DXX) will be used as the name. The initial version of every document will be version 00 and revision 00. The document will be processed and the changes will be saved as revision 01, revision 02, etc. Once the document is considered definitive, it will be saved as version 01 revision 00.

4. INNOVATION AND QUALITY MANAGEMENT

This will be addressed by the industry partners involved and an “Advisory Board (National Implementation Working Groups)” of innovation planning and assistance to companies. They will control the specific quality of the tasks addressing the innovation parts of the project, in consultation with the coordinator AEE INTEC. They will give regular

feedback on this to the other partners and have a management budget allocated to them for this purpose.

The industry partners will address the field of innovation management, especially the prototypical implementation of existing business models in the

overall process (WP5). The process of design and testing the results in the CRAVE zero pin-board (WP7) as prototypical implementations in a multi-disciplinary process should enable spin-offs from research to market for the involved industry partners. The innovation management of the project will also include a set of tools to cooperate with a common

understanding of processes and goals together with the industry partners.

Innovation Management will be addressed on the one side by creativity development techniques such as brainstorming, lateral thinking, scamper methods, mind mapping and by integrating process improvement techniques such as benchmarking with existing solutions on the other side.

4.1 DECISION-MAKING MECHANISM

The General Assembly - GA is the consortium body to take all decisions. It meets regularly every year, or more often if necessary. Each partner is represented in the General Assembly with one vote. The GA will formulate suggestions and reach decisions in accordance with the CA on:

- ① Work program content
- ② Financial management
- ③ Intellectual property management

The GA is responsible for monitoring the overall progress and execution of the project. This shall be accomplished through the direct feedback provided during the annual meetings. GA meetings can take place physically or through cyber conferences. All decisions will be preferably unanimous but will be considered official based on a 2/3 majority of those present at the meeting, except for party member entry/exit requiring unanimity.

Each Workpackage leader is responsible for the practical realization of his respective WP, for planning and monitoring the work, to represent the WP on the General Assembly. If necessary, the WP leader organizes meetings / telephone conferences for his WP. The WP leaders in CRAVEzero are all familiar with project management.

4.2 MANAGEMENT STRUCTURE AND PROCEDURES

The coordination of the project relies on a triumvirate of 3 organisations:

- ① AEE INTEC
- ② EURAC
- ③ Fraunhofer ISE

These three members have a specific role in the overall management and coordination of the project (AEE INTEC overall coordination, Fraunhofer ISE/EURAC coordination of Work Packages, national coordination with industry and LOI partners). The first is the overall responsible coordinator for communication of the partners, EU-administration

and reporting, the second looking on the strategy points and the quality of the project outcomes and the third networking and checking the outcome against the stakeholders and clients (“Advisory Board (National Implementation Working Groups), see Figure 1.

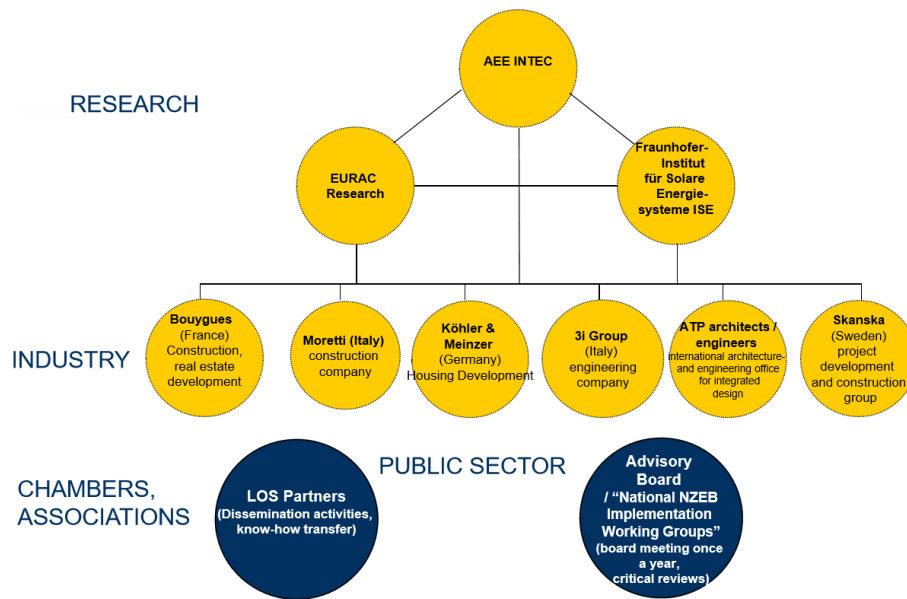


Figure 1. Coordination/ Management Structure:

4.3 QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

CRAVEzero will implement feedback loops between the separate WPs to maximize accuracy for the respective WPs results. The CRAVE zero Gantt chart will define the relevant timelines with the milestones. The travelling cost will be minimized in organizing joint gatherings combining e.g. project meetings and stakeholder workshops. Skype/ Webex communication will be also a preferred communication for intermediate meetings.

The project management plan is detailed and has his defined outputs, like defined quality checks, and other deliverables. The risks are defined and allocated to each WP. Mitigation measures are well defined and adequate to respond to risks. CRAVEzero has integrated committed consortium partners with a strong willingness for team work and communication. The CRAVEzero research partners have proven efficiency through several joint projects.

5. DATA MANAGEMENT

- Data protection and privacy has to be respected, and appropriate solutions for data storage and handling must be established
- Open access to data should be the main principle for projects funded by public money
- Data should be discoverable, accessible and interoperable to specific quality standards
- Integrity of the research depends on the quality of data and that data are not manipulated, and data should be assessable and intelligible.

Data research management will be done in compliance with Article 19.2 of the Model Grant Agreement. The basic principle is that data should be accessible to the public, and a dedicated area of the www.cravezero.eu web site will be used for sharing publicly accessible data. Exceptions from access can be made to protect legitimate academic or commercial interests, such issues will be handled by the Management Committee. One such example is financial implementation data where protection of information revealing for instance industry partners' general cost structure or competitive conditions may be needed. CRAVEzero is committed to distribute

results and publications via Open Access publishing and has allocated dedicated resources for this. Proprietary data gathered by a consortium member remains in the care of that consortium member, and will not be distributed to any other consortium member or any party outside of the consortium. All consortium shared data will be stored in secure environments at the locations of consortium partners with access privileges restricted to the relevant project partners. Processing and use of data will follow Directive 95/46/EC and the "General Data Protection Regulations law".