



COACCCH

CO-DESIGNING THE ASSESSMENT OF CLIMATE CHANGE COSTS

CO-CREATING RESEARCH: BEST-PRACTICE GUIDELINES

Our Partners



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Impressum

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The findings of the COACCH project are available at:
www.coacch.eu/deliverables

Further reports on the COACCH approach to co-creation are available at:
[D1.4 Co-design and co-delivery protocol.](#)
[D1.10 Findings from thematic working groups and deep engagement case studies](#)
[D5.8 Best practice for co-designed research](#)



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Aim of this briefing note

In this briefing note we synthesise key lessons drawn from the evaluation of the collaborative process of the COACCH project. Based on our evaluation we propose step-by-step guidelines for best-practice in co-creation. For each of the five steps we outline relevant activities, provide illustrative examples and give practical implementation guidance for others engaging in collaborative research projects. Crucial elements of success include having dedicated knowledge brokers to guide collaboration, being open to feedback and having regular and above all transparent communication about the process.

Definitions

The following definitions are used in COACCH:

Co-design is the participatory design of a research project with stakeholders (the users of the research). The aim is to jointly develop and define research questions that meet collective interests and needs.

Co-production is the participatory development and implementation of a research project with stakeholders. This is also sometimes called joint knowledge production.

Co-delivery is the participatory design and implementation for the appropriate use of the research, including the joint delivery of research outputs and exploitation of results.

About COACCH

The EU Horizon 2020 project **CO-designing the Assessment of Climate CHange costs (COACCH)** was an innovative exercise in collaborative research practice and policy integration.

Over four years (2017-2021) a team of Europe's leading climate impacts and economic modellers engaged in an iterative collaboration with around 40 end-users from business, investment and policy.

The results of the project are available at:

www.coacch.eu

Co-creation in the COACCH project

In recent years, research collaboration has expanded far beyond the confines of scientific partnerships. Co-design, co-creation, and co-production are just some of the terms used to describe how research projects seek to engage with a range of non-academic partners.

After four years of working together, collaborations between researchers and stakeholders in the COACCH project have produced new analyses for downscaled assessments of the risks and costs of climate change in Europe. This joint approach represents a major shift from previous European economic cost studies on climate change which have had only limited stakeholder engagement.

The COACCH project implemented a 'bounded' approach to co-creation, focused on creating usable knowledge for decision makers. In this approach, the research team were responsible for developing the structure and topics for discussion with stakeholders helping to refine the assessments' focus. This 'bounded' approach was, on the one hand, open enough to allow for broad stakeholder and researcher exchange. On the other hand, it was focused enough to ensure that outputs met specific decision-making needs and were taken up in policies such as the EU Climate Adaptation Strategy.

The collaborative research programme was conducted through different phases of co-creation (co-design, co-production, co-delivery) delivered through workshops, bilateral meetings and technical discussions.

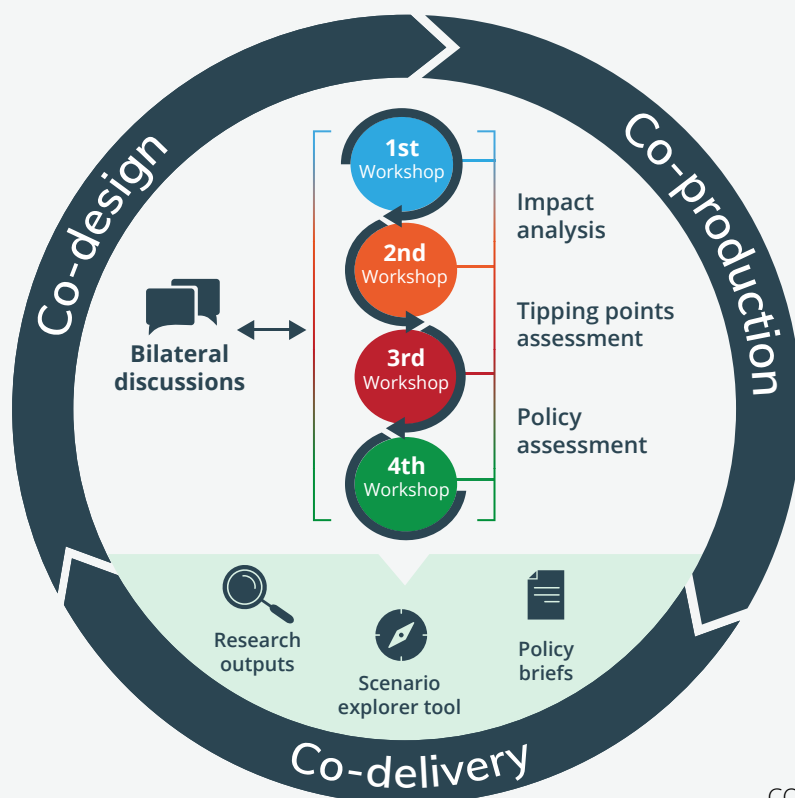


Figure 1. Overview of COACCH co-creation process

Lessons learned from COACCH

The COACCH project was evaluated on a continuous basis and fed back into the design of the project's collaborative activities. The full evaluation report is available [here](#). The evaluation highlighted a number of insights which we summarise in the six lessons learned below.

Lesson 1: Establish robust structures for stakeholder management

COACCH had a core team of knowledge brokers to manage the co-creation process. Engagement with each COACCH stakeholder was channeled through a dedicated 'relationship manager' (selected member of the research team). This worked well, providing stakeholders with a **reliable and direct access point** to receive project updates and communicate their needs. It also meant that research results could be tailored and easily incorporated into the stakeholders' decision-making processes. However, this targeting of individuals rather than organisations led to some gaps; over four years there were changes in staff responsibility or their capacity to participate. Several stakeholders recommended engaging with a larger number of representatives; **involving several people from an organisation** can not only reduce communication bottlenecks but may also bring a greater depth of knowledge to the project.

Lesson 2: Carry out activities that emphasise the joint process

The COACCH collaborative process was developed based on an extensive review of co-design literature. The approach was presented and discussed at the first stakeholder meeting. The aim was to develop a **shared sense of direction** for the project and for all

parties to agree on their roles and responsibilities. Designing specific outputs (e.g. economic assessments or policy briefs) was an important part of the joint process. There were regular check-ins on these research outputs. At the same time, there was perhaps a missed opportunity to use these updates to also revisit the initial agreement on the co-creation process. Stakeholders further highlighted that a **visual guiding element** such as a project roadmap is helpful to guide and mark progress.

Lesson 3: Clarify mutual expectations of the partnership

Several stakeholders commented that COACCH had far higher levels of collaboration than other projects. The research teams embraced the opportunity to exchange more closely with stakeholders and most found the guidance for their work a positive experience. However, many researchers were **unprepared for the scope** of stakeholder engagement in a co-creation project. In parallel, stakeholders may not have had altogether **realistic expectations** for the outputs, given the parameters of the economic models selected. The primary lesson here is that both researchers and stakeholders had **implicit assumptions** about what the partnership would deliver. Such assumptions should be made explicit and discussed regularly to clarify and manage expectations.

Lesson 4: Demonstrate you are listening to stakeholders

Stakeholders were encouraged to develop co-ownership of the research by determining the topics and questions that COACCH should focus on. **Regular and transparent reporting** on progress was carried out for each research question to demonstrate accountability and increase trust between researchers and stakeholders. Wherever possible, relationship managers supported stakeholders by **tailoring outputs** to the needs of

a specific policy window or other decision-making process. This was done primarily to increase the usefulness of outputs but it also had the function of encouraging stakeholder buy-in and commitment to the project. COACCH has had numerous successes where results or outputs were included in policy documents, because of this approach.

Lesson 5: Vary and adapt forms of engagement

COACCH hosted a total of four interactive stakeholder workshops (two in person, two virtual). **Different preferences for engagement** were accommodated through voting exercises, visioning, small group discussions, poster presentations, quiet individual work, panel discussions and more. The first workshop was appreciated for its open dialogue spaces in which research questions and the terms of engagement were co-designed by participants. The feedback on the second workshop was more critical of the balance of presentation to discussion. However, understanding the needs of stakeholders was part of the purpose of frequent evaluations. Gathering this type of information allowed the team to **make iterative adjustments** to the design of subsequent events which received more positive feedback.

Lesson 6: Don't underestimate communication

The evaluation process revealed the central importance of being clear about communication expectations in collaborative projects such as COACCH. Efforts were made to have **open channels for communication** and to **share interim results on a regular basis**. The background briefings circulated before workshops were positively received and those interviewed found these to be useful, clear and of high quality. However, in interviews, stakeholders made the plea for even **more and earlier internal communication** to keep them abreast of interim progress.

It was intended that COACCH social media activity would complement workshop and bilateral project interactions with more frequent updates, but it is important to bear in mind that not all stakeholders are regular social media users.

Summary

The general findings of the COACCH evaluation suggest that the project and its approach have been well received and appreciated and the results have been of interest and use to many of the stakeholders. However, the COACCH engagement process is certainly open to further refinement. COACCH was an ambitious project, even without the collaborative element. Attempting to co-create knowledge based on highly technical models of climate change and economic impacts was more challenging still.

Nevertheless, there has been a spirit of collaboration and openness to greater stakeholder involvement among the researchers. For many of the modelers **this project has marked a step-change** in the way that may have otherwise approached their activities. Several researchers noted that they had actively considered the stakeholders needs whilst doing their work, in contrast to their usual approach to modelling. The COACCH project has demonstrated that co-creation can deliver important benefits, as compared to a traditional research project. The most important benefits of co-creation identified by the researchers are the improved relevance of research outputs and improved uptake and use of project results. However, co-creation was also found to involve considerably more resources and time.

Guidelines for best practice in collaborative research

Drawing from the literature on co-design and our experiences in COACCH, we propose a set of practical guidelines for co-creation in research projects. These guidelines are for a 'brokered' co-creation process³ and are structured according to three general phases: co-design; co-production and co-delivery. Within these phases are five steps through which co-creation takes place. For each co-creation step we outline relevant activities and provide practical implementation guidance for others engaging in collaborative research projects.

We have structured the guidelines for ease of navigation but the different phases and steps should be viewed as fluid and ongoing (see Figure 2). The evaluation process is essential at all stages of the project and is integrated into the guidelines in a cross-cutting way.

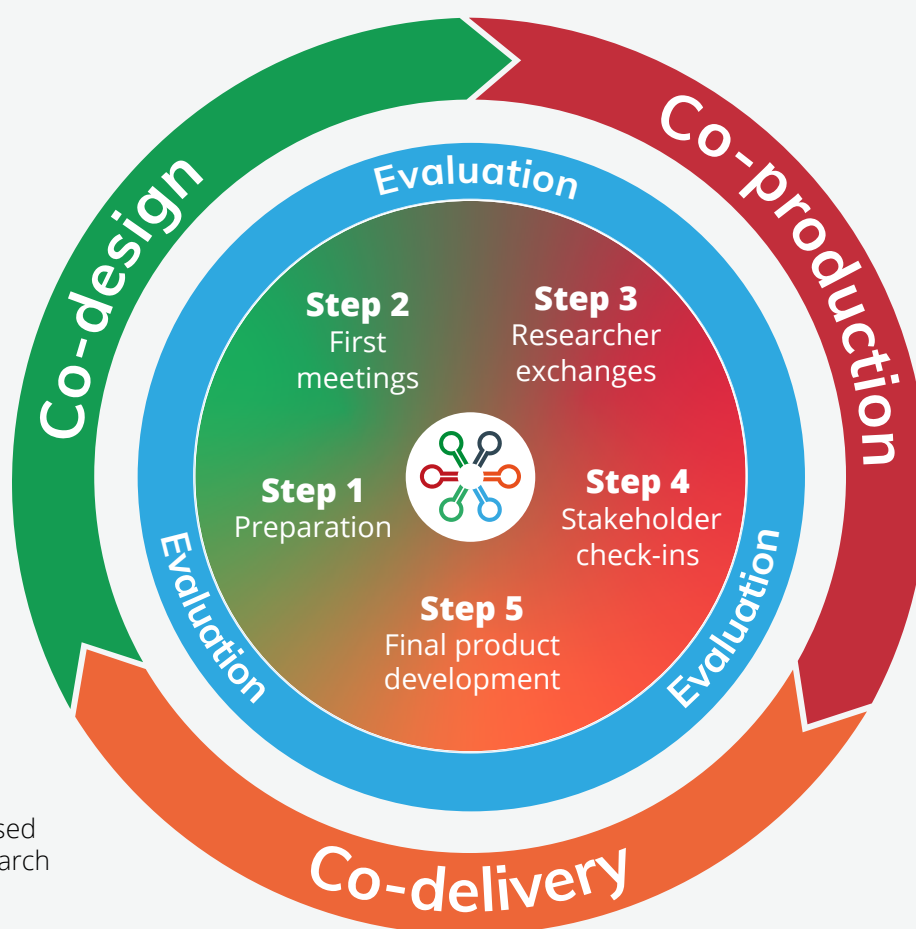


Figure 2. Proposed process for research co-creation

³ This guidance is for projects which, like COACCH, take a 'brokered' approach to research co-creation, i.e. focused on usable knowledge for end-users. Projects with other objectives will need to use different approaches, e.g. emergent approaches to co-design aim to challenge existing thinking and would require a different and more open-ended approach to collaboration.

Step 1: Preparation

Co-design phase

The first phase of the co-creation process is co-design. This includes **Step 1. Preparation** and **Step 2. First meetings**. The aim of the co-design phase is to lay the groundwork for collaboration. This means being clear about expectations for collaboration and agreeing on a process to deliver shared outputs. An initial task is to identify the key stakeholders to work with and together with the research team, agree on the engagement process, objectives and roles. In this initial phase it is particularly important to emphasise the time and resources that will be required for successful collaboration and for all parties to be transparent about their expectations. Once the terms of the collaborative relationship have been agreed, the group should refine project research topics and identify possible research outputs and their uses.

Step 1: Preparation

This preparatory step sets the scene for collaboration and takes place at the very beginning of the project, preferably even during the proposal writing phase. This first involves appointing knowledge brokers to guide the co-creation process and who can act as a bridge between researchers and stakeholders. The knowledge brokers should identify objectives of collaboration and develop a proposed approach. Ideally the approach should be informed by the growing literature on co-creation and draws on other project examples, see **Example 1**. On this basis, the knowledge brokers should brief the research team on the proposed approach and the expectations involved. With the support of the research team, a range of representative stakeholders can then be identified and approached to participate in the project.

Practical guidance:

- ⇒ Appoint knowledge brokers with defined roles and responsibilities to guide co-creation and act as a bridge between stakeholders and researchers.
- ⇒ Meet with the research team to discuss expectations for the collaborative process and reach shared agreement on the proposed approach.
- ⇒ Identify a long-list of potential stakeholder organisations, set criteria (e.g. relevance, coverage) and prioritise in line with project objectives and resources.

- ⇒ Approach stakeholder organisations for participation, ideally with 2-3 people to bring broad institutional knowledge and avoid communication bottlenecks.
- ⇒ Identify contact persons ('relationship managers') within the research team to be responsible for maintaining communication with individual stakeholders.
- ⇒ Conduct an initial survey with each stakeholder to collate user needs, interests and decision-making processes where the project could engage.
- ⇒ Create an easy-to-grasp graphical overview of the project to communicate processes and interlinkages between research activities and co-design processes to stakeholders.



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Example 1

Developing a collaborative approach in COACCH

At the start of the COACCH project, an extensive literature review on co-creation and collaborative research approaches was undertaken. The review included research projects, grey literature such as guidance documents and journal articles. The review was the basis for developing the COACCH approach, including definitions, key principles and activities elaborated within the COACCH project. The principles were revisited several times and formed the basis for evaluation activities.

Step 2: First Meetings



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Step 2: First meetings

The first meetings have the objective to discuss the co-creation process and agree on roles and responsibilities. A further aim is to discuss the research needs and agree a research programme. The first meetings are foundational to building the relationships and commitment necessary to sustain the collaborative element of the project. The tone and choice of activities should therefore be chosen carefully and planned in detail with adequate breaks to encourage a spirit of trust and openness to collaboration. A co-creation project should have a research agenda that has plenty of flexibility built into it from the proposal phase so it can respond and adapt to user interests and information needs **(See Example 2)**. Experiences from co-created projects highlight the particular importance of having tangible 'products' such as tools or reports to work on together. The evaluation process will be iterative and so the process should be initiated even at this early stage.

Practical guidance:

- ⇒ Design meetings with plenty of space for open discussion and informal interaction to support trust and relationship-building.
- ⇒ Present and discuss the graphical overview of the project (see Step 1) adjusting where necessary.
- ⇒ Build on ideas on overall objectives of co-creation gathered with research team in Step 1 – discuss stakeholder expectations, defining roles, rules and responsibilities, channels and frequency of engagement.
- ⇒ Identify key policy and decision-making processes that the project results can feed into

- ⇒ Collaboratively explore proposed research topics and discuss possibilities for joint knowledge products such as reports or tools.
- ⇒ Outline the iterative approach of the project and begin the evaluation process.
- ⇒ At the end of this phase, there should be a clear and agreed process, and a jointly designed research programme for the project to take forward.



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Example 2

Identifying policy and decision-making processes in COACCH

At the first COACCH workshop, we gathered information on stakeholders' current activities and related information needs using a simple template. Stakeholders listed decision-making processes and forthcoming opportunities for policies and plans that COACCH could feed in to and identified the potential time-frame in which the inputs would be required. For example, several national risk and adaptation assessments were due for publication in a few years' time; these provided opportunities for COACCH to support with results within a realistic timescale for the project. Having an overview and timeline of these processes meant that we were able to come back to stakeholders closer to the time, checking which outputs would be most valuable. Mapping these processes was repeated regularly to keep the overview of ongoing activities up to date.

Co-production phase

The aim of the co-production phase is to undertake targeted collaborative work on the agreed research areas such as case studies or deep-dive methodological studies. This phase includes mid-project workshops to discuss and review first available outcomes and methodological approaches. It is where many joint knowledge products are identified. Meetings can be both within the research team as well as between researchers and stakeholders. This phase is also when bi-lateral interactions take place with specific stakeholders, to discuss key issues or develop case studies. The co-production phase includes two practical steps: **Step 3: Researcher exchanges** and **Step 4: Stakeholder check-ins**.



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Step 3: Researcher exchanges

Step 3: Researcher exchanges

The aim of this step is for researchers to explore how to develop the research priorities proposed by stakeholders and then to regularly evaluate their work progress in line with stakeholder priorities, see **Example 3**. Holding these meetings acts as a reminder to the research team of the need to produce outputs that are relevant and useable by end users. However, it does require active management by the knowledge brokers to keep stakeholder interests front and centre of the research. The knowledge brokers need to communicate why these steps are being taken, support researchers in these check-in activities, and act to ensure that they are undertaken through a process of review, evaluation and management.

Practical guidance:

- ⇒ Develop an implementation plan for researchers to deliver co-creation within the project
- ⇒ Review and agree with research team partners on the activities to be conducted
- ⇒ Revisit stakeholder priorities regularly to encourage researchers to ensure the work is considering user needs
- ⇒ Reiterate the co-creation approach agreed in the first stakeholder meetings and find ways to implement this approach in practice through the research.

Example 3**Agreeing on research activities to be conducted in COACCH**

To gather user needs, we used lists of research topics which were discussed and prioritised by stakeholders in the first workshop. During the next internal COACCH project meeting, research teams went through the lists and indicated if the research topics could be covered within the project (yes/maybe/no). The knowledge brokers presented the researcher teams with these lists at least once a year throughout the project. Having to repeatedly return to the lists helped to retain a regular focus on the needs and interests of the users. The lists were used for monitoring and reporting back to COACCH stakeholders during and at the end of the project.



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Step 4: Stakeholder check-ins

Step 4: Stakeholder check-ins

Stakeholder check-ins are central to evaluating progress and experiences of co-created research and should take place on a frequent basis. The objective of stakeholder check-ins, whether in a large group or one-to-one is twofold. Firstly, their purpose is to advance the research, gathering inputs on drafts, interim results, pilots or mock-ups of knowledge products, see **Example 4**. The second objective of check-ins is to facilitate collaborative working and evaluate experiences of co-creation. This includes updating process 'roadmaps' and reviewing stakeholder needs and decision-making processes for the research to feed into. Evaluations of both these objectives should be regular - at least once a year - to ensure that delivery of research content and co-creation process is on track and, if necessary, to adjust the approach.

Practical guidance:

- ⇒ Schedule regular full project workshops (all stakeholders) to refine awareness of user needs and consider how research activities and outputs can respond.
- ⇒ Use a variety of engagement formats during workshops taking care not to reduce break times and reserving enough space and time for a range of informal discussions.
- ⇒ Hold bilateral or smaller group exchanges (e.g. on a biannual basis) to carry out targeted work on case studies or method development
- ⇒ Ensure relevant material is circulated well in advance of meeting to ensure stakeholders are up-to-speed with interim results and have tested beta versions of tools or databases, etc.
- ⇒ Communicate transparently how the research has been adjusted to stakeholder needs and priorities such as presenting research topic tables in **Example 3**.
- ⇒ Regularly review key policy and decision-making processes that the project results can feed into, and how to make this happen in practice.
- ⇒ Review the approach to co-creation and adjust where necessary, updating the graphical overview guiding the project activities if needed.

- Establish and maintain regular contact with individual stakeholders outside of meetings. Use opportunities such as sending newsletters, notification of reports or surveys to touch base and identify areas for collaboration.

Example 3

Discussing interim results in COACCH

Within the COACCH project we used a range of engagement formats to help gather stakeholder inputs. For example, during the second stakeholder workshop we presented methodological approaches and interim results on a number of sectoral assessments in a **'market-place'** format. The session started with short plenary presentations for each assessment followed by a poster session where stakeholders had the opportunity to move freely around the room to discuss different topics. This **'meet an expert'** setting provided space to accommodate stakeholders' different interests and to dive into the specifics of particular questions.



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Co-delivery phase

The aim of the co-delivery phase is to develop products and tools that synthesise the project's findings. This engages with stakeholders to refine the key messages to be communicated and to shape joint knowledge products. These project outputs are then disseminated by researchers and stakeholders to reach decision-making contexts. While this phase tends to occur towards the end of the project, the collaborative development of knowledge products is an ongoing process. In particular, bilateral collaborations may lead to more policy relevant outputs, using experience from stakeholders.

Step 5: Final product development

Synthesised research outputs, e.g. policy briefs or end-user tools, should be developed in an iterative and participatory way. Stakeholder inputs on concepts and draft products should be gathered during previous phases (i.e. during meetings in Steps 2 and 4) to ensure that work in this step is oriented to end-user needs. Bilateral collaboration may also lead to the development of specific use cases which will require their own strategies for dissemination. However, the results should also be shared between stakeholders and the research teams not involved in case study work to encourage shared learning. Later activities can include joint presentations at events or meetings with decision makers to share results and support uptake in relevant processes and documents.

Practical guidance:

- ⇒ Discuss what kind of information is necessary for key decision-making processes or reports and which activities are needed to facilitate uptake e.g. meetings, presentations.
- ⇒ Agree on appropriate formats for summarising research findings e.g. report, database, tool, gather feedback on interim versions and where relevant agree on the key messages these joint knowledge products should highlight.
- ⇒ Carry out internal dissemination activities to encourage shared learning between researchers and stakeholders involved in different project work streams e.g. case studies.

Step 5: Final product development

- Identify opportunities e.g. networks, newsletters, events to disseminate results to the broader communities of interest and arrange targeted activities e.g. meetings, presentations to facilitate uptake of results by specific decision-makers.

Example 5

Developing joint knowledge products in COACCH

Regular discussions with stakeholders – particularly through bi-lateral and informal exchanges – allowed us to understand individual information needs. Being able to use sub-national assessment results for example was particularly interesting to stakeholders. Through these interactions, the COACCH team developed different knowledge products such as policy briefs and targeted analysis to meet specific requests (e.g. briefs with a sectoral or geographical focus). These outputs were then able to feed into ongoing policy processes (e.g. EU Adaptation Strategy). Other products such as the [COACCH scenario explorer tool](#) were tested on several occasions and the filters and visualisations adapted to the needs of users. In this way, the COACCH project demonstrated that close engagement can fine tune research results increasing their use and thus impact.



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Conclusions

This briefing note reflects on a 'bounded' approach to co-creation applied in the COACCH project. The COACCH project has demonstrated that co-creation can deliver important benefits such as improved relevance of research outputs and improved uptake and use of project results. This briefing note has presented six lessons learned and a five-step guidelines for practical research co-creation. From these lessons and guidelines, two essential elements stand out: First is the importance of being **open to feedback** and to have a baseline commitment from all to engage in an adaptive and iterative approach to research. The second is the need for regular and **transparent communication** between researchers and stakeholders about their needs and constraints. This conversation should cover both the direction and aims of the research as well as an honest assessment of available resources and capacities to respond to each other's needs. While there may be agreement to these terms of collaboration on the surface, truly fulfilling them requires constant attention. Crucial to successfully co-created research is the presence of dedicated knowledge brokers to guide the collaborative process from start to finish.

Resources and further reading on collaborative research

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