



EUCALC

Explore sustainable European futures

Method for implementation of EUCalc co-design process

D9.4

08/2017



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Short Description

This deliverable describes method for implementation of EuCalc co-design process – 10 workshops and Call for evidence.

Quality check

Name of reviewer	Date
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Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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1 Executive Summary

This deliverable outlines a consistent Methodology for implementation of EUCalc co-design process. Its role is to provide information to EUCalc partners on design methodology and steps for activities related to stakeholder involvement in the project. It describes the process of preparation and implementation for each of the ten expert co-design workshops and a Public Call for Evidence, that will be organized - during the development phase of the European Calculator - to elicit expert feedback in the different sectors and modules included in the Calculator.

As planned in the Description of Action, the co-design methodology includes user demand evaluation and concretization (Deliverable 9.1.), preparation for co-design (Deliverable 9.3.) and co-design process description. Main role of this document is to describe the activity of co-design, including Call for evidence process, where the experts from public, private and civil society sector will be brought together in each sectoral workshop and given the opportunity to shape the EUCalc by providing their inputs and feedback to the preliminary work (research methodology, preliminary findings and tentative assumptions) made by the Calculator team. Broader group of experts will be consulted via Call for Evidence process. In addition, a concise on-line follow up engagement will be deployed to fine-tune the assumptions, which emerge from each stakeholder meetings.

2 Introduction

This deliverable presents the method and time plan for the expert consultation workshops and the public call of evidence, describing implementation of co-design process of European Calculator project.

The mission of the **European Calculator project** is to provide decision makers with accessible modeling solutions for energy, GHG and social implications of lifestyle and energy technology choices in Europe.

This is an ambitious goal within a limited timeframe. It clearly requires leveraging existing work, and significant support from key experts and stakeholders, not only in the co-design of the document, but also in distribution of EUCalc to a broader audience, their support for our approach and the tool. Co-creation, co-design and co-development are therefore cornerstones of the European Calculator, which - in addition to knowledge sharing and collaboration inside the project team – entails also strong and early engagement of relevant audiences and stakeholders from key/critical segments of society (including **Civil Society, Business Sector, Policy Makers and Planners**) in order to understand needs, mobilize practical and tacit knowledge and integrate them in the European Calculator framework.

In its design, the European Calculator project envisages the **co-design expert consultation workshops** and the **public calls for evidence** as co-creation and consultations activities. They are expected to provide a critical input for the European Calculator team, making sure that the underlying analysis, definition of levers and levels, is robust and credible by the scientific community and independent / aligned enough to be credible to political stakeholders. Therefore, in addition to scientific soundness (credibility), the workshops will assist the project team to increase the Calculator's relevance (saliency) and to take into account the full range of views when we look into what is possible (legitimacy). A well balanced credibility, saliency and legitimacy are expected to increase the usefulness and usability of the Calculator in policy and decision making.

2.1 The role of co-design process in European Calculator

The European Calculator (EUCalc) provides a common platform for informed debate about decarbonisation pathways for Europe. **It is controlled using a range of levers that represent changes we could make to mitigate climate change from now until 2050 and beyond.** For each lever there are different levels of effort – for most this will range from level 1 (make minimal effort to tackle climate change), to level 4 (make an extraordinarily ambitious and extreme level of abatement effort usually associated with a new technology or radical behaviour shift)¹. Levers and levels of effort therefore represent a common definition across different sectors and modules included in the Calculator, for issues ranging from the evolution of transport sector from diesel to EVTAS to the ways people change their mode of transport or diet, etc. In this way, the model does not aim at reconciling different views nor defining one optimal scenario but rather to simulate and reflect the full range of changes believed to be possible.

The role of experts in European Calculator Co-design process:

Objectives of the process:

- Receiving additional inputs from different stakeholder groups to include the most recent, broad scope information, research, objectives and knowledge into EUCalc levels, levers and development process;
- Ensuring support for methods and assumptions for long term sustainability and use of the developed tool;

This will be done through achievement of the following:

What?	Why? How? Details:
Review assumptions and sources of data used to portrait evolution up to 2050 and beyond.	<i>The project team wants to make sure that the sectoral analysis (context, trends, drivers, disrupters, rebound effects ,sources of data) is deep enough to be considered robust and credible by the scientific community</i>
Review suggested scope of action (levers), and identify alternative measures to reduce GHG emissions related to a specific sector/module in the long term.	<i>While the Calculator team wishes the model to be extensive in its scope it is also critical to remain real time and generate results almost instantaneously. We will address this issue by taking into account inputs from experts /stakeholders about the main levers (drivers and trends) that a specific module/sector should aim to address. Setting the right scope is critical for usability and usefulness of the tool. (Once the levers are set, consequent modifications will be hard to implement)</i> <i>Is the range of levers broad enough to account for country specifics? Do we cover a full range, from e.g. countries which offer best examples on a specific matter and also countries/cities which offer examples</i>

¹ globalcalculator.org/about-calculator

	<i>about barriers and difficulties on a specific matter</i>
Agree (in as far as it is feasible) on distributed levels of effort (levels of effort 1-4) for each of these measures across EU 28 + Switzerland, and identify areas in which uncertainty is high.	<p><i>What kind of justification underlies calibration of levels, 1 to 4, and is it credible enough in the view of experts?</i></p> <p><i>What do the extremes look like (level 4) for individual levers? The team understands that much could change over the next 40 years, e.g. technology breakthroughs, cost reductions, behaviour change and wishes to avoid narrow definition of ranges that can potentially underestimate future possibilities</i></p> <p><i>Are the levels of effort 1-4 equally distributed, taking into account country specifics</i></p>
Agree (in as far as it is feasible) on a range of costs (min to max) related to each of these measures (investments, operating costs and fuel requirements/savings, technology)	<i>Questions of cost are usually highlighted as critical by stakeholders, because affordability or cost efficiency of scenarios created and compared under the auspices of the Calculator depends on a number of economic assumptions made. Therefore defining the right min-max ranges is crucial</i>
Discuss potential barriers preventing the implementation of suggested measures and ways to mitigate these barriers	<i>This is relevant in order to create the narrative behind some of the proposed levels of levers, in particular the “very ambitious” ones, and enhance the transparency of the model.</i>
Discuss interactions between sectors/modules of the Calculator	<i>Are there possible uncertainties that users should be aware of when selecting levels in different sectors.</i>

3 Co-design expert consultation workshop(s)

A series of ten expert co-design workshops/meetings will be organized - during the development phase of the European Calculator - in order to elicit expert feedback in the different sectors and modules included in the Calculator. The ambition is that a group of 20 frontline experts from public, private and civil society sector will be brought together in each sectoral workshop (see Del. 9.2) and given the opportunity to shape the EUCalc by providing their inputs and feedback to the preliminary work (research methodology, preliminary findings and tentative assumptions) made by the Calculator team. The workshop stakeholder invitee list (both attendees and non-attendees who are interested) will form the basis of a network of the expert support groups for the purposes of future consultation. The process of choice of relevant experts is described through Deliverable D9.2 Stakeholder mapping, the report that includes a framework for stakeholder mapping and engagement, with the goal to enlarge the knowledge base for all of the research and modelling work packages of the EUCalc project.

General timeframe for the implementation of expert workshops is listed below, while locations and dates will be determined later in the process, taking also into considerations such as interactions and feedbacks between different sectors and modules of the Calculator.

Sector	Deliverable	Date	Responsible partner
Expert consultation on life style development, economic and demographic growth	1.6	June 2017 (M8)	EPFL, SEE Change Net
Expert Consultation Co-Design Workshop on electricity and fossil fuels	5.4	October 2017 (M12)	Pannon, SEE Change Net
Expert Consultation Co-Design Workshop on Jobs, Value Added and Social Impact		December 2017 (M14)	TU Delft, SEE Change Nte, EPFL, OGUT?
Expert consultation workshop on transport	2.3	April 2018 (M18)	Climact, SEE Change Net
Expert consultation workshop on buildings	2.7	June 2018 (M20)	BPIE, SEE Change Net
Expert consultation workshop on land, land use and carbon stock dynamics (LULUCF), biomass provision (food, energy, materials) & minerals	4.2	September 2018 (M23)	Imperial, SEE Change Net
Expert consultation workshop on the biodiversity and water impacts of biomass provision for food, feed, energy and materials	4.3	September 2018 (M23)	UEA, SEE Change Net
Expert consultation workshop on manufacturing and raw materials	3.4	July 2018 (M21)	OGUT, SEE Change Net
Expert Consultation Workshop on identification	6.3	October	TUD, EPFL, SEE

of key socioeconomic parameters		2018 (M24)	Change Net
Expert consultation workshops on trans-boundary effects	7.3	November 2018 (M25)	UCPH, SEE Change Net
Expert consultation workshop on validation of results on different socio-economic impacts	6.4	January 2019 (M27)	TuD, EPFL, SEE Change Net
Concluding workshop for call for evidence	8.8	September 2019 (M35)	Climact

Table 1 Date(s) and location(s) of workshops

3.1 Suggested workshop(s) programme

There are 3 main components of the programme and each will be tailored to the specific needs of each module (WP 1-8) at least 45 days prior to the workshop. The programme template is below and in appendix 1.

Introduction (2h, including registration and coffee break)

- The facilitator will open the workshop outlining the objectives, programme and methodology for the day.
- The short introduction to the model and the process will be given by the EUCalc team, with the help of other calculators (especially Global Calculator) in order to align the experts understanding and introduce them to the type of tool.
- The project team will provide a general overview of the European Calculator project, and summarize the key elements of specific WP 1-8 module (key messages, context and trends, references used).
- Keynote presentation will provide a broader policy, economic, science and development perspective, and it will be designed to frame the subsequent discussion about the possible assumptions and lever settings.

Discussion (4h, including lunch and after-lunch coffee break):

- The main discussion will be segmented to cover individual or clusters of levers. Each segment will include an introduction to the respective lever(s) outlining the underlying assumptions and modelling framework/methodology. This will be followed by conversations around the related discussion questions. (If the levers are not completely defined, a broader discussion on their definition and related subjects will be favoured).
 - The discussion questions will be prepared by WP 1-8 leaders and will be discussed at the workshop with the assistance of a professional facilitator.
 - The workshops are to be planned to get feedback on as many levers as possible and in case time does not allow to go through all of them, the goal is to then go through the critical ones
 - To strengthen the support of the expert, we should ask for their experiences and critical bottlenecks, i.e. in a specific country.

- The methods will include either post its, small group discussions, plenary discussion or else as deemed adequate (for more, see section on facilitation)
- Concluding part of the discussion should move away from specific and provide space for integrative picture, making way towards wrap up and next steps.

Wrap up and Next steps (15min):

- Wrap up session will offer a time for look back at the workshop discussions and serve to collect impressions and feedback from the participants.
- Items identified during the workshop will be tracked until completion by
 - Inviting stakeholders to send evidence on specific issues raised during the workshops and/or suggest additional experts or studies for consultation and review.
 - Creating subgroups on specific topics that require further discussion (e.g. discuss required interactions with other sectors or else)
 - Responding back to expert participants subsequently in case some of the questions could not have been answered by the European Calculator team during the workshop
- Channels for follow up consultation & communication will be set (focal point for contact, website, etc.) and roles identified for stakeholders to stay involved e.g. subsequent feedback, access to early release of the model, ambassadors and promoters, co-authors of papers and articles, etc.
- Notes will be taken during the workshop and the workshop report will be prepared and shared with the participants after the workshop (WP 1-8 deliverables).
- In addition, it should be explained that a concise on-line follow up questionnaire will be deployed to fine-tune the assumptions, which emerge from each stakeholder meetings.

3.2 Workshop(s) preparatory actions

3.2.1 Workshop(s) participants

Stakeholders from public, private and civil society sector will be selected and invited to participate. The selection will be guided by the workshop objectives defined in paragraph 2.1. and needs (what contribution do we need from stakeholders- for example: scientists are able to include inputs on parameters i.e. levers, levels, assumptions, data, policy and decision makers can share their input on future development of policy framework, companies on the development of technologies etc.; what key questions do we need answers to), but all the stakeholders listed and not being able to participate will also be a part of the consultation process. It will also take into account issues such as credibility (e.g. scientific rigor and/or a track record in a specific field) and legitimacy (e.g. unbiased representation that takes into account a range of views). See Stakeholder Mapping deliverable (D 9.2),

In order to be most effective, the selection process should be completed ideally 4 months prior the workshop by the work package lead, with assistance of co-design task lead, and personalized invitation letters should be sent 3 months prior to the workshop, included in the checklist in section 6.3 on page 22.

Leaders of each module (WP 1-8) will prepare a specification – type of experts’ contribution needed for the workshop – to guide a selection process. Additionally, a set of questions will be used to assess whether contributions and viewpoints run the risk of being excluded or overrepresented. Example questions include:

- A group of representative stakeholders is well formed to provide inputs and cover all suggested levers (e.g. technology, behaviour change, costs and other depending on the content of each specific WP 1-8)?
- Are selected stakeholders well suited to provide inputs on levels calibration? Is there a full spectrum of views about possible future trajectories (e.g. countries or business examples that fall on each side of the level spectrum, those under-performing and those excelling)?
- In terms of different viewpoints, is there a meaningful balance of different types of experts (e.g. Public, Civil Society, Business Sector, Science and Technology Innovators)?
- Represented stakeholders are credible, with respectable track record in a specific topic?
- Representatives of sister projects such as REINVENT and INNOPATHS will be invited to take part in the workshops.
- A person with a highly regarded expertise in a specific sector will be invited as a keynote speaker to provide broader insight and frame the subsequent workshop discussion. This person should be identified by the Partner leading the relevant Work Package.

3.2.2 Early engagement of stakeholders and information sharing

To make sure that all selected stakeholders are available to participate, the workshop organizers (WP 1-8 lead and SEECN) will initiate the preparatory work **5 months prior the event**.

Information/invitation letter to key note speaker should be sent early enough, preferably even **4-5 months** prior the workshop, depending on the profile of selected keynote speaker. Formal letter of invitation will be disseminated **3 months** prior the workshop, with a request for a response (registration deadline) by at least **2 months** prior the workshop to ensure early booking of travel and accommodation,

- A formal letter of invitation should give participants sufficient information about the purpose and requirements of the workshop, so that invitees can make an informed and voluntary decision about participation, including items listed below. Invitation letter template is in appendix 2.
 - Date and time and location;
 - Information about project (factsheet);
 - Thematic framework and key discussion issues of the specific workshop;
 - Desired contribution by experts;
 - Financial arrangements if applicable including travel expenses, accommodation.
 - Benefits of participation e.g. opportunities for subsequent feedback, access to early releases of the Calculator, an offer of co- authorship of a peer reviewed paper on analyzing the outcomes of the workshop.
 - Risks/Note on confidentiality and personal data management assurance).
- Specific method for invitation and registration will be discussed and agreed between WP 1-8 leaders and SEE Change Net (SEECN), normally by email and/or registration platforms (e.g. Eventbrite). Management of registrations will be done either by SEECN or WP 1-8 leaders, as more suitable.

Once all the received registrations have been processed and queries resolved, **1 month** prior the workshop, final confirmation of registration should be sent to participants including Workshop title, dates, location; Agenda, Contact of focal point; Accommodation details and directions to workshop venue (map), Information sheet on Informed consent.²

Finally, stakeholders should be given enough notice and sufficient content information before the workshop so that they can read the materials and prepare to contribute, preferably **2 weeks** in advance. The scope and content of the preparatory material will be defined by WP 1-8 leaders.

Checklist for early engagement and information sharing is in appendix 3, see page 22.

3.2.3 Workshop(s) material

The WP 1-8 leaders should prepare PPT presentations and discussion questions as input to the workshop conversations, with final versions completed at least 2 weeks prior the workshop. WP 1-8 leaders should decide and designate presenters (involved in the research, fluent in English, experienced in presentations).

Introductory presentations will use a standard set of elements:

²Note: Information sheet and Informed consent should be signed by participants at the workshop and therefore including them for review as part of the registration confirmation is recommended. Draft information sheet and Informed consent are in appendix 4, see page 25.

- Project goals, project factsheet – *SEECN providing template*
- Model facts, structure, linkages, modelling process – *Climact providing template*
- Overview of a specific module/sector - WPI-8*

Discussion PPTs ideally containing a material tailored according to content and needs of each WP 1-8 module

- Assumptions, data sources, modelling framework, etc. in a sector/modules – *WPI-8*
- Suggested levers – *WPI-8*
- Levels of ambition per defined levers – *WPI-8*
- Questions for the discussion per lever and levels – *WPI-8* Other issues – *WPI-8*

Templates for presentations introduction slides are prepared by SEECN together with Climact by and will also be reviewed and discussed with individual WP 1-8. WP10 provided support with branding (for PPTs but also other workshop material such as invitation letters, reports, etc.)

3.2.4 Workshop(s) facilitation & participatory methodology

Role of the facilitator: An experienced, professionally trained facilitator will be contracted for each of the WP 1-8 workshops to support the workshops discussions, participation and to ensure equal contribution of participants. Respective WP 1-8 leaders, SEECN and facilitator should meet 3 months' prior the workshops to make a time plan for consequent discussions on the following topics:

- Make facilitator familiar with desired outcomes, issues (lever, assumptions etc.) and expected contribution by experts and stakeholders
- Introduce facilitator with the list of participants based on thematic area and type (private, public, civil society, science)
- All additional issues related to facilitation process

Staff appropriately: The module (WP 1-8) leader will prepare presentations and designate presenters for each section of the programme.

Members of the project team (respective WP 1-8 leaders, SEECN and possibly other partners) should participate in the event making sure that all roles and tasks are taken care of (notes taking, logistics, etc.) and that all the questions from experts and stakeholders are appropriately addressed.

- Define who will answer the questions (e.g. per levers, for example – assumptions, technical measures, behavioural measures but also those related to stakeholder engagement process and other matters).
- Define the decision making at the workshop especially on content related issues, or alternatively acknowledge all expert inputs, make decisions afterwards and report back to stakeholders with justification for the positions and decisions taken with regard to their inputs.
- Define who will take notes, manage the registration and other practical matters on the day of the workshop

Information of and from the participants will be handled in line with deliverable D 12.1

Checklist for stakeholder identification and selection of 20 participants for the workshop (summary of the process defined in D9.2 Stakeholder Mapping, and in line with the process described in the deliverable) :

- All partners in charge for the co-design process with the stakeholder mapping, identification of experts for the expert consultation workshops, identification of stakeholders to be invited for dissemination activities and events confirmed that they will not gather any personal data, except publicly available contact information.
-
- Relevant experts in the field will be identified by
 - a) publicly available contact information
 - b) existing contacts of consortium
 - c) addressing invitations to associations/interest groups/national representatives
- The Calculator team's contact data base (e.g. stakeholder mapping) will include only publicly available information and will not be shared outside of the purpose of the Calculator project.

Checklist for invitations and provision of information to stakeholders:

- The project team will make sure that information sheets/invitations are written in a language and in terms that can be fully understood – describe the aims, methods and implications of the research, the nature of the participation and any benefits, risks or discomfort that might ensue.
- The project team will explicitly state that participation is voluntary and that anyone has the right to refuse to participate and to withdraw their participation at any time — without any consequences.

3.3 Post workshop(s) activities

In addition to wrap up and debriefing session at the end of the workshop the participants will be asked to anonymously answer a set of questions defined through evaluation form, in order to provide useful feedback and help the EUCalc team to improve similar events in the future. Post workshop(s) reporting

In gathering and reporting on the experts' inputs, the Calculator team will only record information that is necessary to address the central purpose of the research, and ensure it is anonymised (Chatham house rules).

One of the common features of the 2050 Calculators consultation process is reporting back to the participants of any stakeholder engagement process (transparency). A minimum, adequate response includes feedback on the choices the team makes afterward (e.g. what is the final set of levels and levers, assumptions and data choice and why). If these decisions are too early to be taken within the time agreed for reporting back to participants, then a website or wiki link or other information method should be included in order to allow the participants to follow the progress in work and Calculator's development.

The report should be prepared, reviewed and shared with the workshop participants at the latest 12 weeks after the workshop. The report sent to participants will at the same time be WP 1-8 Deliverable [1.6, 2.3, 2.7, 3.4, 4.2, 4.3, 5.4, 6.3, 6.4, 7.3 (8.8.)].

- Items identified during the workshop should be tracked until completion by
 - o Inviting stakeholders to send evidence on specific issues raised during the workshops and/or suggest additional experts or studies for consultation
 - o Creating subgroups on specific topics (e.g. to discuss required interactions with other sectors or else) if suitable
 - o Responding back to participants in case some of the questions could not have been answered by the European Calculator team during the workshop
- Set up channels for follow up consultation & communication and identify roles for stakeholders to stay involved e.g. access to pilot release of the model, ambassadors and promoters, co-authors of papers and articles, etc.

4 Call for evidence co-design process

Co-creation is a central component of the EUCalc model, they include expert co-design consultation workshops, and the iterative public call for evidence

The idea behind Call for evidence process is to provide to wider audiences the final opportunity to comment the data, levels and levers of the model. Therefore, the process of co-creation will not be limited to the participants of expert workshops, but broaden to interested public and wide spectrum of experts, with different expertise and geographical coverage.

They will be given the opportunity to view data from all countries and EU-level data in the form of easily understandable model process tree and Call for evidence web-tool, that include historical trends, assumptions and ambition levels for different sectors: energy supply, transport, buildings, LULUCF, biomass, biodiversity, manufacturing and materials, transboundary effects, socio- economic and lifestyle parameters. If they are in possession of data of higher quality or newer than those used for model development, they will be able to suggest changes, with relevant and scientifically reliable sources.

4.1 Milestones

Activity/Milestone	Responsible partner	Timing
Release of EUCalc call for evidence model	Climact	M25/November 2018
Release of EUCalcweb-tool - call for evidence version	CMF	M26/ December 2018
Call for evidence process	Imperial	M26-M28/ Dec 2018- Feb 2019
Report on results of Call for evidence	Imperial	M28/February 2019
Concluding workshop for call for evidence	Climact	M35/September 2019

Table 2 Call for evidence process

- After the team has considered the results of the co-design expert consultation workshops and integrated the accepted changes, full model will then be published as a "call for evidence" version.
- Model will be published online with support of web-tool, for easier understanding of the data and the model.
- The Process of online consultations will last for 2 months. During this period of time, project partners will ensure wide spread of the information on the Call for evidence process, via:
 - Linking *Call for evidence model and web-tool* to their own **web-pages** and social networks

- Using **stakeholder log** as primary source of contacts for wider distribution (See D 9.2)
 - Using their own contact list of sectoral or non-sectoral, national and international additional experts
 - **Managing questions** and suggestions from experts, led by Imperial
 - **Supporting** task leader in creation of Call for evidence report, suggesting integration of data and comments into their respective sectoral module
- Conclusions from Call from evidence will be integrated in the model and presented during the final workshop

5 Conclusion

Deliverable D 9.4. helps project partners in carrying stakeholder interaction and input into the final model, provides necessary templates for workshops and summarizes links to other deliverables, namely D 9.1., D 9.2, D 9.3., describing the process of co-design as a whole.

Project partners will use this deliverable as guidelines for implementation of co-creation process during the development of the model.

6 Appendix documents

6.1 Appendix 1 Programme Template

This is provisional agenda template, as a basis for discussion with WP 1-8 teams and facilitator, when finished it has to be provided on adequate template..

8.45-9.00 Arrival, registration

9.00 – 9.25 Welcome& introduction of participants

9.25 – 9.40 Introduction to the European Calculator project and partners

(Speaker: European Calculator representative)

9.40 – 10.10 Keynote presentation

Critical role of *[WP 1-8 sector/module]* scenarios in facilitating robust climate mitigation policy

(Speaker: Keynote guest speaker)

A broader policy, economic, science and development perspective

10.10 – 10.25 Introduction to the European Calculator *[WP 1-8]* sector/module

(Speaker: European Calculator researcher)

Summary: key messages, assumptions, modeling framework, data sources

10.25 – 10.45 Discussion (1)

Gather ideas, questions, needs and expectations from stakeholders

10.45 – 11.00 Coffee break

11.00 – 12.15 Presentation, discussion, defined interactive setting (2)

(Speaker: European Calculator researcher)

Presentation on a specific lever or lever clusters (accompanied by discussion questions)

Assumptions (lever/s); Details of the ambition levels and costs per lever/s; Barriers to reduce emissions; Other: social impact, interaction with other sectors etc.

12.15 – 13.15 Lunch

13.15 – 14:30 Presentation, discussion, defined interactive setting(3)

(Speaker: European Calculator researcher)

Presentation on a specific lever or lever clusters (accompanied by discussion questions)

Assumptions (lever/s); Details of the ambition levels and costs per lever/s; Barriers to reduce emissions; Other: social impact, interaction with other sectors etc.

14.30 – 14:45 Coffee break

14.45 – 15:15 Presentation, discussion, defined interactive setting(4)

Same as 2 & 3



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15.15 – 15:45 Discussion (4)

(Facilitator) *Back to big picture and integrative discussion questions, making way to wrap up*

15.45 – 16:00 Wrap up and next steps



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6.2 Appendix 2 Invitation letter template

European Calculator: Expert workshop on [insert module name]

The workshop will be held [back to back with [name of conference in case of "back to back]] at the following time, date, and location:

Date, from

Location

Registration is limited for conference participants and upon invitation. Register with your email address to attend this event before [insert deadline, 2 months in advance] [Link for registration](#)

Dear [Name],

We want to invite you to take part in a co-design expert workshop for the development of an EU wide (and Switzerland) public policy climate change model funded by the European Union's Horizon 2020 programme. We called it the European Calculator or EU Calc.

The mission of the EU Calculator project is to provide decision makers with an accessible energy modelling solution to quantify the sectorial energy demand, greenhouse gas (GHG) emissions trajectories and social implications of lifestyles and energy technology choices in Europe.

This workshop is devoted to the [insert module name] module of the European Calculator and represents one in a series of ten workshops and meetings that will be held during the development phase to elicit expert feedback in different sectors included in the Calculator.

The critical role of the [insert module name] module is to define the scope of action and to allow users of the future Calculator to simulate a number of [insert module name] trajectories and its associated greenhouse gas (GHG) emissions, according to different demands for products (goods and services) by 2050. The workshop will investigate the corresponding levels of ambition and effort that reflect the full range of what experts believe could be possible by 2050.

We have identified you as a key expert/ decision /policy maker active in the research and debate on tomorrow's [insert module name] and are keen to receive your input to shape the European Calculator.

During this workshop, the objectives and the scope of the European Calculator project will be explained and participants will be asked to discuss research methodology and preliminary findings within the [insert module name] module to ensure that we use the best data, to validate our assumptions, and account for the full range of opinion when we look into possible futures. Examples of questions that the workshop will aim to address are: [insert critical questions for a specific module...]

We are delighted to have [insert name and designation in case we have keynote speaker], has confirmed his/her participation as keynote speaker.





We hope that you will take the opportunity to join a group of experts across academia, the public and private sectors as well as civil society to take part in this forward looking exercise. The European Calculator team is also committed to the continued collaboration and exchange with workshop participants including [suggest benefits of participation e.g. subsequent feedback, access to early releases of the Calculator etc..]

Please register before [insert date, 2 months in advance] [Link for registration](#)

Travel and accommodation costs to [insert location of workshop] can be covered by the project, please let us know if needed. Should you require further information about the workshop or project in general, I would be happy to speak with you.

Looking forward to seeing you at this once-off workshop on Sustainable Lifestyles!

Kind regards,

Prof. Dr. Jürgen P. Kropp
Coordinator of the European Calculator Project
Potsdam Institute for Climate Impact Research (PIK)

[Insert name of person leading the module]

Organizer of the [insert module name or title of workshop] workshop

[Insert name of partner institution leading the module]

[SEECN representative (in case SEECN sends and manages invitations)]

Co-Organizer of the [insert module name or title of workshop] workshop

SEE Change Net (SEECN)

Note: The consortium would like to assure you that any personal data or information you provide will be kept strictly confidential and will be securely stored and retained for the lifetime of the project and deleted thereafter. In gathering our data, we will only record information that is necessary to address the central purpose of our research, and ensure it is anonymised. Furthermore, should you agree to participate in this workshop, and subsequently feel unable or unwilling to continue, you are free to leave without negative consequences. That is, your participation is completely voluntary, and you may withdraw from this project at any time.



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Website: www.european-calculator.eu

6.3 Appendix 3 Checklist on early engagement and information sharing

A large part of what makes a workshop successful occurs in the preparation phase. Agendas and additional materials, if timely shared, help to prepare participants and keep them active/without an excuse of not being able to follow on the topics due to lack of information.

Plan for information sharing stated below will be moderated by SEE Change Net team in agreement and cooperation with respective WP1-8 leading partner, and is meant to ensure timely creation of all documents.

What	Timing	Responsibilities	Assign responsible
Make sure you have evaluated stakeholder groups and selected 20 for participation prior to "save the date"/invitations send outs	15/05/17 /alternative: at least 4M prior to the event	WP 1-8 teams	
Key note speaker invitation p.11	4-5 M		
Choose the date of the event & the location of the event	Preferably 4M before the event	WP 1-8 teams	
Organize location p. Errore. Il segnalibro non è definito.	Same as above		
Choose facilitator	At least 3M prior to the event	SEE Change Net	
Prepare and send invitation letters (incl. registration link) to 20 selected stakeholder, informing them on purpose, date, time and place of the event, financial details (travel and accommodation costs).	3M prior to the event with registration deadline at least 2M before the event	WP 1-8 teams (adjust content of the invitation letter and provide a contact list of 20 selected stakeholders)	
Include also short note on the confidentiality and personal data protection. Attach FACTSHEET of the project.		SEE Change Net (sends/manages invitations and registrations) unless differently agreed	

Repeat invitation – in case low number of invitee responded and registered (optional)	1 week before the registration deadline	SEE Change Net - in cooperation with WP 1-8	
Keep in touch with registered participants, process registrations, resolve queries, arrange travel and accommodation details	Start 2M prior to the event and complete at least 1M before the event	WP 1-8 lead partner's administrative and financial units, since the budget is with respective WP 1-8 partners	
Make sure that the workshop material(p.12) is drafted : <ul style="list-style-type: none"> <input type="checkbox"/> Summary, key messages and references, <input type="checkbox"/> Context and historical trends, <input type="checkbox"/> Methodology overview (process and model methodology), <input type="checkbox"/> Basic assumptions in a sector, <input type="checkbox"/> Details of the ambition levels and costs per lever, <input type="checkbox"/> Barriers to reduce emissions, <input type="checkbox"/> Other: social impact, interaction with other sectors etc.). 	1.5M prior to the event	PPT Templates by SEECN and WP 10 (branding) Content and tailoring: WP1-8	
Communicate regularly on the goals, questions, timings with the facilitator	3M prior to the event, intensify over the last few weeks before the event	WP 1-8 with support from SEECN team	
Based on draft workshop materials, create detailed, final agenda	1.5M prior to the event	WP 1-8 with support from SEECN team and facilitator	
Send registration confirmation to all	At least 1M prior to the	SEE Change Net -in cooperation with WP 1-	

<p>registered participants:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Workshop title, dates, location; <input type="checkbox"/> Agenda <input type="checkbox"/> Contact of focal point <input type="checkbox"/> Accommodation details and directions to workshop venue (map) <input type="checkbox"/> Information sheet and Informed consent 	event	8	
<p>Finalize workshop presentations and designate presenter for each section of the programme</p> <p>Prepare and send preparatory reading material to participants (Summary, methodology overview in short, basic assumptions, basic info on levels/levers) (<i>optional</i>)</p>	2 weeks prior to the event	WP 1-8 and SEECN team	
<p>Final arrangements with facilitator</p>	1-2 weeks prior to the event	WP 1-8 with help from SEECN team	
<p>Be sure you have all the logistics and materials for the event prepared in advance, ideally with all the specific technical needs listed and communicated to the venue</p> <ul style="list-style-type: none"> <input type="checkbox"/> Room setup (plenary and breakouts), <input type="checkbox"/> Space for registration and for breaks (lunch, coffee/tea) <input type="checkbox"/> Catering with menu that accommodates different dietary requirements; water/drinks during the sessions, coffee and tea breaks. 	1-2 weeks prior to the event	WP1-8 and SEECN team	

<ul style="list-style-type: none"> <input type="checkbox"/> Equipment (projector, screen) <input type="checkbox"/> Flip chart paper, markers, pens, post its, stickers and else as required by facilitator <input type="checkbox"/> Name badges <input type="checkbox"/> Agendas <input type="checkbox"/> Print outs/handouts if any <input type="checkbox"/> Informed consent for signing <input type="checkbox"/> Attendee list for signing <input type="checkbox"/> Final PPTs on USB 			
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Table 3 Checklist for workshops

6.4 Appendix 4 Information Sheet and Informed consent

EU CALC - Pathways for a sustainable Europe

Expert workshop on [insert name of module]

Date: [insert date]

Venue: [insert location]

Information Sheet

The mission of the European Calculator project is to provide decision makers with an accessible energy modelling solution to quantify the sectorial energy demand, greenhouse gas (GHG) emissions trajectories and social implications of lifestyles and energy technology choices in Europe. The European Calculator project will deliver an urgently needed comprehensive, transparent and dynamic framework for research, business, and public sector decision makers. The project and associated decision support tool will identify and enable the synergies and trade-offs arising from feasible European decarbonisation pathways to be rapidly and robustly evaluated. The project is funded by the European Union's Horizon 2020 programme

The workshop in [insert location], on [insert date] represents one out of ten workshops that will be held during the development phase of the European Calculator to elicit expert feedback in different sectors included in the Calculator. During this workshop, the objectives and the scope of the European Calculator project will be explained and participants will be asked to discuss research methodology and preliminary findings within the [insert name of the module] module to ensure that we use the best data, to validate our assumptions, and account for the full range of opinion when we look into possible futures.

Please take time to read and understand the following, and if you agree sign the consent form overleaf.

I freely and voluntarily consent to be participant in this *Workshop, to co-design a novel energy model under the framework of the European Calculator project, in [insert location], on [insert date].*

The European Calculator project assures you that we will only record information that is necessary to address the central purpose of our research, and ensure it is anonymised. This information will be securely stored and retained for the lifetime of the project and deleted. Furthermore, your name will not be linked with the research materials, as the researchers are interested in the content in general, and not in any individual values or choices.

I understand that if at any time during the Workshop I feel unable or unwilling to continue, I am free to leave without negative consequences. That is, my participation in this Workshop is completely voluntary, and I may withdraw from this project at any time.

The research data shared is to be managed under strict rules, defined under EU Calc. The benefits of participating in this research provide you with the opportunities for feedback to shape the Calculator, access to early releases of the Calculator, an opportunity to network, an offer of co-authorship on a peer reviewed paper analysing the outcomes of the workshop, etc.)

I have been informed that if I have any questions seeking further clarification or assurances about the ethical issues relating to the project, I am free to contact [insert name of WP 1-8 lead contact/researcher, name of institution, phone and email contact]



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 730459

EU CALC - Pathways for a sustainable Europe

Expert workshop on [insert name of module]

Date: [insert date]

Venue: insert location

Informed Consent Form

I agree to participate in Expert workshop on [insert name of module].

The purpose of the Workshop has been explained to me in writing.

I am participating voluntarily and understand that I can withdraw from the research project, without repercussions, at any time, before it starts or while I am participating.

I am satisfied that the assurances of responsible and strict data governance, given by the *European Calculator project*, will be upheld.

I understand that anonymity, by disguising my identity, will be ensured at each research stage in the project, unless otherwise agreed.

A copy of the information sheet and (this) signed consent form will be given to the signee.

Signed.....

Date.....

6.5 Appendix 5 Checklist on reporting and follow up

The following checklist suggests timeframe for after-workshop activities.

What	Timing	Responsibilities
Prepare and send Thank you note and to participants and interested stakeholders who were unable to attend	1.5 week after the event	SEECN team with inputs from WP 1-8 leading partner
Process evaluation results	3 weeks after the event	SEECN team
Set up channels for follow-up activities and additional email exchange, like agreed during the workshop	3 weeks after the event at the latest	WP 1-8 leading partner
Prepare and send Workshop report to participants	3M after the event at the latest	WP 1-8 leading partner with support from SEECN team

Table 4 Reporting checklist

6.6 Appendix 6 Checklist on confidentiality

Stakeholder mapping	<ul style="list-style-type: none"> <input type="checkbox"/> Stakeholder Diary (excel file) serves for sharing, storing and organizing information in a systematic manner about relevant stakeholders (groups and individuals) across WP 1-8 sectors that can have an impact or give contribution in the definition and development of the European Calculator. This database should include only publicly available information about stakeholders. <input type="checkbox"/> Keep in mind that this process is confidential, do not share information from this mapping exercise outside consortium
Informed consent form & Information sheet (From WP12)	<p>Checklist for information sheets/invitations/information provision for participants:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Make sure that invitations and related information are written in a language and in terms that can be fully understood – describe the aims, methods and implications of the research, the nature of the participation and any benefits, risks or discomfort that might ensue. <input type="checkbox"/> Explicitly state that participation is voluntary and that anyone has the right to refuse to participate and to withdraw their participation at any time – without any consequences. <p>Information sheet and consent form should be sent together with registration confirmation since the participants will be required to sign at the workshop. They are drafted and provided in appendix.</p>
Confidentiality in the co-design process	<ul style="list-style-type: none"> <input type="checkbox"/> Apply Chatham house rules in workshop discussions <input type="checkbox"/> Information from the participants are to be collected in a way that the participants are not identified, but not anonymous (they are stated as participants of the workshops but not directly connected to their comments) <input type="checkbox"/> Use measures to protect the confidentiality of data (minutes of meeting and reporting)
Report	<p>Use report template drafted by SEECN and provided in appendix.</p>

Table 5 Confidentiality Checklist