



EUCalc Dissemination and Exploitation Strategy

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Short Description

This document sets the project's objectives for communication, dissemination and exploitation, outlines the audiences that shall be targeted and according project outcomes, formulates respective messages, presents a choice of tactics and tools and defines how impact will be evaluated.

Quality check

Name of reviewer	Date
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This deliverable contains original unpublished work except where clearly indicated otherwise.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.



DISSEMINATION AND EXPLOITATION STRATEGY

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Version description

The main difference from the previous version is the inclusion of a dedicated exploitation strategy into the document sections (pages 27ff.). This will be further fleshed out with the planning of concrete measures in the Exploitation Plan (D10.10) which is due in month 36.

Furthermore, the identity, objectives, tools and the dissemination and communication to the business community and technology innovators section have been revisited and updated.

In the monitoring and evaluation section (pages 44ff.), the level of indicators at month 18 were added and the list of KPIs extended to include indicators for exploitation.

The EUCalc project delivers an urgently needed, comprehensive and open source framework for politicians, innovators and investors that enables the appraisal of trade-offs and synergies of feasible European decarbonisation pathways. Co-designed with scientific and societal actors, this framework will be accessible through an online tool called the Transition Pathways Explorer, with a first version in 2018. This tool will allow you to run your own emission scenarios in real-time. It will be simple enough to be used by non-experts, yet complex enough to be authoritative. With this tool you can find pathways for technological and societal transformation given obstructive inertia and lock-in effects. EUCalc enables to address the EU's sustainability challenges in a pragmatic and dynamic way without compromising on scientific rigour.

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Abbreviations

4IR – The fourth industrial revolution

CSO – Chief Strategy Officer

DG – Directorate-General

EC – European Commission

EDPI – European Commission High-level panel of the European Decarbonisation Pathways Initiatives

ENVI – Committee on Environment, Public Health and Food Safety

GHG – Greenhouse gas

ITRE – Committee on Industry, Research and Energy

KPI – Key Performance Indicator

MEP – Member of the European Parliament

MOOC – Massive Open Online Course

NGO – Non-Governmental Organisation

Summary

The strategic Communication, Dissemination and Exploitation of the EUCalc project and its results is the focus of this document. The success of the EUCalc project is to a reasonable extent bound to whether its main outputs will have a substantial impact on the desired stakeholders. The engagement of these audiences or stakeholders is, therefore, vitally important.

The Dissemination and Exploitation Strategy sets the project's communication objective, outlines the project Consortium's common understanding of the audiences/stakeholders that shall be targeted, formulates messages, presents a choice of tactics and tools and defines how impact will be evaluated.

The EUCalc project brings together, among others, brilliant scientists from different disciplines with excellent reputations. This authority is presumably the biggest capital for the communication and dissemination of EUCalc and should be used whenever possible.

Introduction

This document on strategic communication and results dissemination and exploitation is one of the main building blocks of the "Dissemination, Communication and My Europe 2050 tool" work package. The aim of this paper is to shape and structure activities and to facilitate the communication of the project's identity and its objectives as well as the dissemination and exploitation of its results. Since EUCalc's dissemination, communication and exploitation activities have different aims for different parts of the project and for different audiences at different times, this document also serves as the foundation on which to decide on how, when, and in which way to communicate with the audiences we intend to engage.

To guarantee a high visibility and a consistent presentation of the EUCalc outputs that are to be (co-)developed, it is necessary to combine efforts and synchronise the way the consortium partners communicate about the project. In order to integrate the project partner's understanding and to benefit from their strengths, the Climate Media Factory and T6 Ecosystems asked all project partners to share their opinion through a questionnaire in early 2017. The answers provided valuable insights into the understanding and perception of the project by consortium partners and are reflected within this strategy.

One important way to engage with multipliers and potential future users is by exploiting the extensive stakeholder interaction during activities such as the series of ten co-design expert consultation workshops, in which model assumptions and ambition parameters are being defined, as well as during the call for evidence. This is specified in the stakeholders' engagement strategy (see Del. 9.4).

This strategy is a dynamic document that will continue to be updated throughout the lifetime of the project. An evaluation and monitoring module will, therefore, assess the effectiveness of tactics and channels and will formulate change requirements when, and where, necessary. A final evaluation of this strategy will be part of the final report.

The whole EUCalc "comms" team, consisting of project partners T6, SEECN, TUDelft, CMF, and also Imperial and PIK, contributed to this strategy and continuously supports all partners to optimally present the project as well as their particular contribution.

This version updates the dissemination and communication strategy released in April 2018 so as to include the strategy for exploitation. The section on exploitation is partly based on the results of a questionnaire filled in by project partners regarding individual partner's exploitation activities and objectives. The chapter covers how to make use of results for political, scientific, societal or commercial purposes and identifies different types of exploitable results, barriers and risks as well as partner roles and responsibilities.

Easy first steps for partners

The extant networks, contacts and existing communication activities & media platforms of the individual researchers and networkers in the consortium are the most powerful resource of EUCalc communications effort. Following are some suggestions on how partners could leverage their existing communications around EUCalc results. Often it only needs a little effort to strengthen the visibility of our project.

Simple ways to support the dissemination could be, for example, to:

- add the address of the EUCalc website (<http://www.european-calculator.eu>) in your personal email footer;

- place a prominent link to the project on your institution's website;
- highlight recent results, upcoming events or suitable resources in your own newsletter, Facebook, Twitter or LinkedIn accounts;
- forward the EUCalc newsletter if you think it could be of interest for someone in your network, inviting them to sign up to the newsletter;
- share topical policy briefs;
- write an email to the responsible person in your institution to follow us on twitter (@EU_Calculator) or subscribe to our upcoming YouTube-channel;
- highlight in presentations not only EUCalc but also specific project resources, if suitable.

If you have any need for support or if you have any further suggestions on how to improve communication and dissemination of the project, do not hesitate to contact the EUCalc communication team.

EUCALC Identity

Goal

The EUCalc project has the goal of delineating emission and sustainable transformation pathways at a European and member state scale. The project will develop a novel, real-time, transparent open source model and a Transition Pathways Explorer, combined with learning tools designed at a level of complexity that is appropriate for European and national policy makers, businesses, NGOs and other actors of society.

This innovative, pragmatic modelling approach is positioned between complex society-energy systems modelling and integrated impact assessment tools. It introduces an intermediate level of complexity and a multi-sector approach that is based on co-design with scientific and societal actors.

The EUCalc Transition Pathways Explorer is the interface between the user and the model. Decision makers in EU institutions, politicians, influencers, innovators and investors will be able to create their own pathways with this web application in real-time and directly visualise how compliant these are with the European mitigation targets.

The combination of trade-off and synergy analysis with future challenges in energy provision and climate protection will show clear limits and opportunities for policy makers for EU28 + Switzerland.

The EU calculator project is one of only three projects providing the High-level Panel of the European Decarbonisation Pathways Initiative (EDPI) with a highly accessible, user-friendly, dynamic modelling solution to quantify the sectoral energy demand, greenhouse gas trajectories and social implications of lifestyle and energy technology choices in Europe. The two sister projects are INNOPATHS and REINVENT.

Its scientific mission is to develop a sophisticated, yet accessible, model to fill the gap between integrated climate-energy-economy models and the practical needs of decision-makers. The model links emission reduction with human lifestyles, the exploitation and/or conservation of natural resources, job creation, energy production, agriculture, costs, air quality, etc. in a highly integrated tool which enables decision makers to get real-time policy support underpinned by comprehensive trade-off analysis.

The following paragraphs are an attempt to summarise the project in short and long form. All consortium partners are asked to use them - or a version slightly adapted to the interests of the particular target audience - to describe the EUCalc project on their website, in newsletters, and in other contexts. This ensures a consistent presentation of the project and its objectives.

Short form description

The EUCalc project core goal is to build a modelling tool, which enables non-modellers to create pathways towards sustainable and low-carbon European societies and shows potential trade-offs.

Long Form Description

The EUCalc project delivers an urgently needed, comprehensive and open source framework for politicians, innovators and investors that enables the appraisal of trade-offs and synergies of feasible European decarbonisation pathways. Co-designed with scientific and societal actors, this framework will be accessible through an online tool called the Transition Pathways Explorer, with a first version in 2018. This tool will allow you to run your own emission scenarios in real-time. It will be simple enough to be used by non-experts, yet complex enough to be authoritative. With this tool you can find pathways for technological and societal transformation given obstructive inertia

Text to be used in external communication

and lock-in effects. EUCalc enables to address the EU’s sustainability challenges in a pragmatic and dynamic way without compromising on scientific rigour.

Additionally, the following bullet point list can be used to characterize the project.

There are three key things you need to know about the EUCalc Project:

1. EUCalc is building an innovative new model for a scientific underpinning of European energy, emissions policy AND the consequent societal, environmental and land use impacts;
2. EUCalc is one of three critical HORIZON 2020 projects whose results contribute to the work of the High-level panel of the European Decarbonisation Pathways Initiatives (EDPI) of the European Commission;
3. EUCalc is aimed at policy makers in EU institutions, business and civil society organisations as potential end users.

Vision

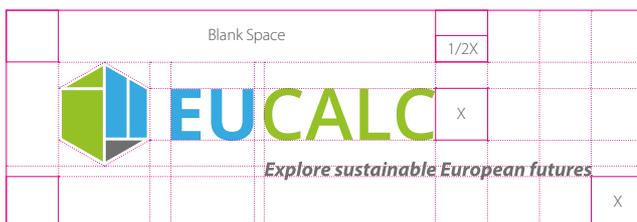
The Transition Pathways Explorer aims to become THE most widely used European online tool to assess strategies for policy- and decision-making in the field of decarbonisation of European societies in view of supporting the goal of keeping global temperatures below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

Visual identity and brand

To achieve long-lasting outreach, it is necessary to have a strong brand. In order to achieve this, a logo and an Identity Handbook (see Appendix) were developed for the EUCalc brand, the latter containing design and layout guidelines as well as mandatory standard texts for all publications.

Logo

To ensure visibility of the EUCalc project activities and outputs, the project partners are asked to use the EUCalc logo as specified in the Identity Handbook.



The coloured geometric elements of the logo may be interpreted as the various sectors and dimensions (the model components in our work) that have to be integrated to decarbonise the system and indicate that there are various possibilities on how to combine these (which will be the main feature of the

Transition Pathways Explorer). The geometric elements also synthesize the identity of the European project with the stylization of the EU Acronym. When trying to detect a three-dimensionality in the logo, irregular cubes can be discovered that seem to be open to different sides. This expresses the need to be open to unconventional, transformational approaches when aiming for decarbonisation goals.

Strapline

Based on the suggestions the consortium partners made when answering the questionnaire, the claim „Explore sustainable European Futures“ has been proposed as the most effective strapline to reach and engage the relevant target groups. It was agreed upon at the second project meeting in London in May 2017. The strapline is used to explain the spirit of the project in a few words. The logo and strapline should be used together to mark all project materials.

Topical keywords

The following keywords can be used to describe or identify the EUCalc project, services and tools:

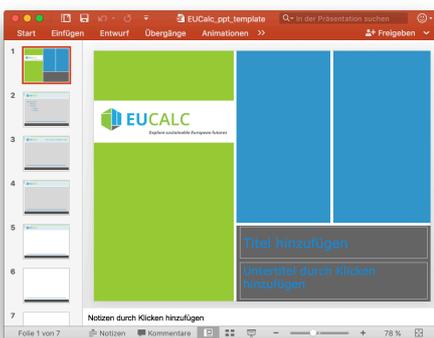
Low-carbon society, low-carbon economy, technology innovation, interactive pathway exploration, transparent modelling, climate services, decarbonisation, transformation, sustainable energy future, constructive disruption, land use, future lifestyles, carbon calculator, do the math!, open source, (well below) two degrees, policy web tool, decision support, science-society interface, zero emissions, no coal, the future is now, green jobs, green future, co-design, stakeholder-involvement.

Templates

The analysis of the questionnaire results showed high interest among consortium members to have prefabricated communication materials, especially PowerPoint slides. Partners indicated the readiness and willingness to disseminate the information about EUCalc to their networks, presuming the existence of appropriate material. As a first step, T6 provided a PowerPoint template that has been sent to all members via email and is stored on the project consortium’s file sharing tool.

EUCALC - Explore sustainable European Futures

#DoTheMath



Identity handbook

The identity handbook specifies the usage of the EUCalc logo and of accompanying fonts and colours, in addition to the EU rules for publications.

The rules in the identity handbook are binding for all dissemination activities and materials, e.g. publications, seminars, websites, press releases and press articles that partners produce in the framework of the project.

Standard texts for publications

According to the European Commission rules and following the Consortium Agreement (par. 8.4), the standard sentence

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should be included in the acknowledgements of any publication. It should be accompanied, if possible, by the European Flag (available @ https://europa.eu/european-union/about-eu/symbols/flag_en). In addition, the following sentence has to be included in any text.

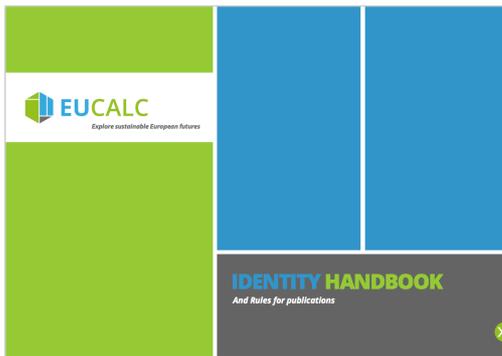
The [following text] reflects the author's views. The European Commission is not liable for any use that may be made of the information contained therein.

Objectives and targets

Engaging audiences / key stakeholders

As highlighted in the EUCalc identity above, key policy and decision makers, who are interested in, or are working on, sustainable low carbon development pathways, are in general the main audience for the EUCalc products such as the Transition Pathways Explorer, followed by private sector policy makers in the business community moderated through associations and civil society. Most project partners named the following groups of policy makers as the most important target groups:

- Staff and officials of the European Commission, including Directorate-General (DG) for Environment, Agriculture, Climate, Energy, Transport and Research;
- Relevant Members of the European Parliament, such as members of the European Parliament Committees on:



Standard texts for publications

EUCalc target groups

Industry, Research and Energy, (ITRE), as well as those on Environment, Public Health and Food Safety (ENVI), Transport (TRAN) and Agriculture (AGRI);

- Members of the High-level panel of the European Decarbonisation Pathways Initiatives (EDPI);
- The European Modelling Platform (EMP)
- Policy makers and parties in the European Parliament;
- Renewable energy associations;
- Business associations; Institutions at the science-policy interface;
- Non-governmental organisations (NGOs);
- Consulting companies;
- Civil society.

In order to optimally address the different target groups, the following sections include user needs, key messages and story-lines, as well as tools dedicated to the specific audience.

Objectives

The following specific objectives all contribute to Communicating the EUCalc project activities, objectives and main outcomes, to Disseminating the research results, and to supporting the exploitation of the tools and results.

Objectives

- Create, consolidate and curate a database of key stakeholders, decision makers and high-level influencers whom we communicate with and disseminate result through the process of Expert Consultations, Call for Evidence etc. so that they become invested advocates for the EUCalc project;
- Create a high visibility of the EUCalc Transition Pathways Explorer for policy makers and other socio-economic stakeholders (including MS LT strategies and NECP developments);
- Enable policy makers to understand the most important levers for decarbonising the European economy and to estimate the impact of planned policies with an objective and scientifically sound online tool;
- Raise awareness of the pathways for a low-carbon society in Europe amongst university and school students and the general public through an educational tool and a Massive Open Online Course (MOOC) module;

- Achieve high visibility within the scientific community in the field of energy and economic modelling research through scientific publications, event and conference participation;
- Ensure widespread presentation and diffusion of project results to maximise impact on decision making; and
- Support the re-use of the model and the exploitation of the tools in other projects.

Best possible outcome of implementing this strategy

The EUCalc project consortium envisions the Transition Pathways Explorer to strengthen the interest amongst EU institutions, business associations and NGOs for decarbonising the European economy and to provide possible pathways to reach it. These stakeholders will be tracking the genesis of the model and the Transition Pathways Explorer through various channels and will provide valuable insights along the way, by getting involved in vivid discussions about their expectations and needs. When the Transition Pathways Explorer will be launched, they will start to use the real-time information on the impact of decisions for their political, administrative and entrepreneurial work. Pathways will become established arguments within political processes and, therefore, known across civil society. Furthermore, educational institutions will be intensely using the educational material and resources provided by EUCalc.

General tools and channels

The EUCalc project plans creating the following tools and channels:

- Expert Stakeholder Engagement Workshops
- EUCalc Transition Pathways Explorer
- Call for Evidence
- My Europe 2050
- Town Halls
- MOOC Module
- AV Pathways Narration
- Key Messages Publication

Expert Stakeholder Engagement Workshops

The EUCalc addresses multi-dimensional and inter-disciplinary issues, which require a wide range of expertise to develop the tool. It is for this reason, that the EUCalc embeds a co-design process with stakeholders who are leading experts in their field, organised through a series of workshops, one for each main module (work package). Through this process, expert stakeholders - coming from public and private sector, academia and civil society - are involved in a co-design process, in order to shape and calibrate the EUCalc tool by helping co-design the determinants and the scope of the scenarios. The workshop invitees are therefore an important basis of a network of supporters for all steps within the project related to communication, dissemination, the future use of the EUCalc tool.

EUCalc Transition Pathways Explorer (Lead: CMF)

The EUCalc Transition Pathways Explorer is a web application that provides the interface between the user and the model. It can be used as a planning tool for reconciling the urgent need for technological and societal change, against the associated inertia and lock-in effects. As such it shall provide rapid policy support at an EU and country level.

The user can create an individual emission pathway for Europe by choosing an ambition level for all relevant decarbonisation levers. The consequences of these choices for energy supply and demand, energy security and system costs, land use and biodiversity, water availability, people's health, employment, equity and transboundary effects are presented comprehensively and instantaneously. This provides immediate insights about potential trade-offs and synergies of decision-making in different sectors. A warning system and an economic module validate the viability of the chosen pathway.

Call for Evidence (Lead SEECN)

After the team has considered the results of the workshops, the full model, all assumption and contributing deliverables will then be published as a purpose designed public "call for evidence" on its data and approach so that anyone can comment on the model design, assumptions and scenarios. The consortium partners' experience with previous calculators on different levels promises to offer very helpful feedback to be collected by such a call, as often bugs are spotted and more evidence comes to light that was not available before. In addition, the Call for Evidence further helps to engage with key stakeholders encouraging them to become invested advocates for

the EUCalc project. This will be complemented by a concluding workshop led by Climact.

“My Europe 2050” educational tool (Lead: CMF)

A key component of ensuring enhanced societal impact is through the development of the EUCalc “My Europe 2050” e-learning tool for education. This tool will offer a simplified interface with a reduced set of levers to interactively create a decarbonisation pathway and graphical representations of the respective changes. This tool will extend the impact of the project results beyond the expert and decision maker realm. It can be taken as a dissemination activity on its own. To stimulate the use of the educational tool, the project will produce handouts and materials for educational institutions (business schools and universities) with background information.

“Town Hall” discussions (Lead: SEECN)

A specific effort has been made to map and identify business community experts in order to communicate timely and ensure their evidence-based contribution to the Expert Stakeholder Consultation Workshops across different sectors included in the EUCalc tool (buildings, industry, land use and biodiversity, transport, etc.).

To disseminate and promote the final product, EUCalc Transition Pathways Explorer, among business community and technology innovators, a series of “Town Hall” discussions on climate change is planned in six centres of excellence/challenge with a good geographic spread of country profiles. The events will address the socio-economic implications of and incentives for medium- to long-term decarbonisation pathways of the EUCalc Pathways Explorer, informing the business stakeholders about emerging trends and scientific results which will influence policy and could ultimately impact their businesses. Even though a significant share of energy modelling is done by private sector, in cases where modelling is used to inform public policy, the use of open source data and modelling platforms such as EUCalc Pathways Explorer constitutes an added value for business sector.

Instead of organizing stand-alone events which according to our experience may have less impact in terms of attracting business stakeholder, we are considering partnering with business federations in targeted countries to co-host the “Town Hall” discussions.

Additionally, a media outreach campaign targeting profile interviews with business champions will be organized at each

event talking about costs, benefits and risks outlined by the EU-Calc Transition Pathways Explorer.

Massive open online course module for educational purposes (Lead: TUD)

A massive open online course (MOOC) is an openly accessible, web-based course designed for large-scale enrolment and instruction. The EUCalc project will develop such a dedicated audio-visual module that will explain how to use the Pathways Explorer and what it can tell you. The module will consist of short videos (seven minutes each) with exercises and examples. It will be offered to leaders of all existing MOOCs related to climate change effects and technologies as an additional module. It will be developed for all audiences (students, parliamentarians, journalists, etc) and be offered as a stand-alone tool to underpin regular education, dissemination, PR and other uses.

Audio-visual pathway narration (Lead: CMF)

The audio-visual products accompanying the communication and exploitation of the EUCalc Pathways Explorer will be various. A key challenge for any low carbon pathway is that extensive societal changes will occur and people in general fear change, which makes issues such as climate change challenging in policy terms because the change is extensive and the threat, while existential, is a distant one for most people. To tackle this issue an additional set of three videos will be produced with the aim of highlighting the “positives” in response to necessary changes in the everyday lives of people, which would be caused by the more ambitious pathways. These narrative videos will show plausible and desirable alternative societal scenarios to foster societal acceptance of a low-carbon future and to raise awareness of the resulting long-time benefits.

In addition, CMF will produce a video that will show how to use the EUCalc tool. The videos will be disseminated through various channels, depending on their nature. Explanatory videos will be shown at high-level meetings and expert workshops. Links to the videos will be included in emails addressed to the audiences. They may become part of presentations given by consortium partners to their specific partners and clients. The videos will be shown in educational contexts, regarding the “My Europe 2050” dissemination and especially on online channels such as YouTube, Facebook and others to raise awareness on the videos as well as on the possibilities provided by the Pathways Explorer.

Key messages publication

The dissemination and communication team will write a publication featuring key messages as soon as key messages can be identified from model outputs. This document will be inspired by the respective document the Global Calculator team published, “Prosperous living for the world in 2050: insights from the Global Calculator.” In this document, different key messages and main findings were summarized: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/398596/Global_calc_report_WEB.pdf

Table 1: Overview of the communication tools and channels that are planned to be used in order to reach different target audiences within the EUCalc project.

Tools and channels	Politicians & EU Institutions			Business	Science		Public
	DGs	MEPs	MEP's assistants	Business associations/companies	Social scientists	Energy modelers	
OFFLINE							
Meetings	x	x	x	x	x	x	
Conferences	x			x	x	x	
Workshops	x	x	x	x	x	x	
Other Events (e.g. fairs)	x			x			
Personal connections	x	x	x	x	x	x	x
Seminars/training			x	x			
Presentations/speeches	x	x	x	x	x	x	x
Personal networks	x	x	x	x	x	x	x
Flyer/postcards	x	x	x	x	x	x	x
Reports/deliverables							x
Scientific publications					x	x	x
ONLINE							
E-mails	x	x	x	x	x	x	x
Newsletter	x	x	x	x	x	x	x
Multimedia content	x	x	x	x	x	x	x
Social media	x	x	x	x	x	x	x
Website	x	x	x	x	x	x	x
Call for evidence	x	x	x	x	x	x	x
Model code WIKI	x			x		x	
Sector method WIKI	x	x	x	x	x	x	x
Pathways Explorer	x	x	x	x			
MOOC	x	x	x	x	x	x	x
Educational tool “My Europe 2050”							x

Communication and dissemination to policy makers in EU institutions (Lead: SEECN)

User needs

European institutions in the focus of this communication and dissemination component of the strategy are the European Commission bodies and the European Parliament - which through its members from all 28 states will be used as proxies for outreach to national level due to budget constraints. In line with this focus, project results will:

What political actors want.

- contribute to the work of the European Commission high-level panel of the European Decarbonization Pathways Initiative (EDPI);
- feed into the European Modelling Platform (EMP);
- form the overall requirements of the HORIZON Programme.

The key European Commission bodies include DG Energy and Climate, DG Research and Innovation, DG Agriculture and Rural Development, and DG Transport etc.

The European Union Parliamentary groups include - Clean Energy Package Rapporteurs, ITRE, AGRI, TRANS, and ENVI committee members, HORIZON Rapporteurs, Parliamentary Caucus Advisors, and Accredited Assistants. As has been found out from input given at the demand concretisation workshops and during one on one discussions, these stakeholders want to:

- see impacts of pursuing more or less ambitious policy pathways in their own country and across other countries;
- compare and contrast governance reporting obligations under the clean energy package across and between states;
- understand what drivers exist at a macroeconomic level and their interplay with policy pathways;
- explore “out of the box” modelling of possible decarbonisation pathways and estimates of associated costs as an aid to future policy development;
- use the tool in aid of advocacy related efforts and activities;
- check burden sharing within Europe and with the Rest of the World (RoW);

- learn from other countries and their experiences with policy instruments and
- be able to produce results in real time.

Key messages and storylines

EUCalc has a strong focus on assisting decision makers and other stakeholders (mainly civil society, environmental NGOs, and companies, including SMEs) involved in climate and energy policy in assessing the socio-economic implications and incentives for medium to long-term decarbonisation pathways with the EUCalc Pathways Explorer. Its scientific mission is to develop a sophisticated, yet accessible, model to fill the gap between integrated climate-energy-economy models and the practical needs of decision-makers.

The policy makers (public sector) will have the opportunity to consider long-term EU targets on GHG, renewables, energy efficiency and their interconnection.

Within the group of public decision makers two main categories have been identified - European Parliament MEPs and European Commission officers of various DGs.

Main message for MEPs

Interaction with MEPs is targeted by a number of events including the high-level event for the launch of the Pathways Explorer, a dissemination workshop with members of the Committee on Industry, Research and Energy (ITRE), and a training event planned with MEPs assistants and Party Caucus Advisors.

The main message for these settings should be: EUCalc is a very useful, real-time, scientifically grounded tool which can help inform policy debate.

Interaction with officers of the EC to earn their “buy in” and to obtain their inputs is facilitated through stakeholder meetings and the high-level event for the launch of the Pathways Explorer. In addition, a series of policy briefs is planned to complement the impact of these events.

Main message for EC officers

The main message: While this model is not an official EC tool, it is produced through HORIZON 2020, it has asked for inputs from a significant number of DG’s and is scientifically rigorous enough for you to be able to trust.

Tools

Stakeholder Consultation with key actors in relevant DGs and key members of ITRE, ENVI, TRAN, AGRI committees etc. as well as political groupings and Rapporteurs for the Clean Energy Package (2018) and others.

High-level event for launch of EUCalc Pathways Explorer: In order to guarantee an immediate and extensive outreach of the web-tool to policy makers, a launch event for EUCalc Pathways Explorer with at least 80 participants will be organized in Brussels. The target group are MEPs and European policy makers (DG-Res, DG-Clima, DG-Env, DG-Energy, DG-Agri, DG-Health) as well as Business and CSO, though these are dealt with in a separate section, in charge for the implementation of the SET-Plan and other climate, energy, agriculture and health relevant policies.

Tailored visits to at least one key person in each of the DGs (DG-Res, DG-Clima, DG-Env, DG-Energy, DG-Agri, DG-Health). Give them one consultation briefing before and one after launching the Pathways Explorer.

Dissemination workshop: It has also been recognized that the best entry point for engaging with the EU Parliament (as perhaps the ultimate policy makers / model users) is through the MEP representatives on the European Parliament's Committee on Industry, Research and Energy (ITRE). The governance and reporting mechanisms Party Caucus Advisors by ITRE in the new Clean Energy Package contain some useful synergy with EUCalc. In view of this, the identification of stakeholders will target rapporteurs of various Clean Energy packages alongside party coordinators for one day stakeholder workshop session.

Policy briefs will be created to condense policy-relevant information and to facilitate the transfer of research findings to political actors at various EU levels. Planned topics are the marker pathways in general alongside EUCalc Pathways Explorer. These policy briefs will be distributed during events such as the EU Sustainable Energy Weeks, the planned high-level EUCalc Pathways Explorer launch and the dissemination workshop. In addition to the above, the briefs will be distributed widely among representatives of policy making bodies and civil society organizations.

Training of MEPs Assistants, Focal Points and DG Officials: The launch of the High-level event for of EUCalc Pathways Explorer will be organized back to back with a training session for the Assistants and Focal Points on Energy and Climate Change within the EU Parliament and DG Officials on how to use the tool to inform policy making.

Dissemination and communication to the business community and technology innovators (Lead: SEECN)

The business community and innovators within that community represent a critical target group for several reasons: they are responsible for significant emissions across several sectors and indeed often drive solutions for emissions reduction, they possess real world data to underpin the model's assumptions and are well positioned to provide baseline opinions for assumption around new technologies and TRLs. They are unlikely to become exploiters of the project results in the absence of buy-in across project components.

User needs

Members of the business sector want:

- to be informed about emerging tools, trends and scientific results which will influence policy and could ultimately impact their businesses;
- to ensure that real private sector data on costs and emissions etc. are reflected in the model to make sure it is grounded in real world data;
- to provide inputs on possible future technological and behavioural solutions in specific sectors;
- to have an understanding of how challenges across sectors can impact the policy debate;
- to be involved in the delivery of modern energy services that improve the quality of life;
- to use the model to improve efficiency, increase investment in renewable energy and bring additional value to the society of 4IR;
- to know the numbers of the respective sector's impact on carbon emissions and prioritise possible measures to reduce them;
- to have tools to help consolidate certainty in an uncertain world.

Technology innovators want:

- to have a tool that successfully follows the trend of digital transformation in the energy field;
- to use the tool as the basis for development of plans and future actions.

Key messages and storylines

Key messages for business actors and tech innovators.

Business can help EUCalc to base its scientific assumptions and settings by providing real world data and knowledge to the project.

Business can gain insight into the trade-offs underpinning key assumptions on technologies and processes through the Expert Stakeholder Consultation.

EUCalc can help Business to predict varying demands of the market and to manage service, costs and uptime.

The project provides Business with a means to explore the option space of future developments in order to inform robust development.

Tools

- „Town Hall" discussions with stakeholders;
- Media outreach campaign targeting profile interviews with business champions and EUCalc team members that will cover the topics of 4IR and digital transformation;
- Participation on various business forums, especially the ones covering digital transformation (speaker involvement);
- Participation on tech events (speaker involvement);
- One-on-one meetings.

Scientific dissemination (Lead: PIK)

The scientific dissemination in the EUCalc project will be nested foremost in the outcomes and development process of the EUCalc model. Outcomes include the model code itself, the source data, assumptions, calculations and documentation of each module. By development process it is meant the discussion of the modelling assumptions made, problems found, and technical solutions undertaken. We describe the user needs

below, as well as the tools and dissemination channels to better illustrate the scientific dissemination strategy of this project.

User needs

Scientific actors

The scientific dissemination will be mostly linked with, but not limited to, researchers and consultants. This is because the main outcomes of the scientific work undertaken require a certain degree of understanding of modelling (both at the abstract and technical level) and specificities of European and global energy systems.

Researchers

Researchers are constantly looking to expand their portfolio of approaches and sources of information on which they can base their science. Accordingly, we envision the outcomes of the EUCalc project to be useful for a researcher who would like to compare his/her results in relation to those developed in this project. The comparison can be at different levels. Either a comparison of model outputs (at different spatial scales and sectoral domains), methodologies employed, assumptions, code or other. Whatever the case might be, successful outreach depends on the openness of information (see data management plan in Del. 11.2), and on how widespread the EUCalc project is advertised in the usual scientific channels.

Consultants

Consultants are driven by tight deadlines and bound to pragmatism. The appeal of the EUCalc project to consultants lies mostly in the supply of a modular model that can be adapted to their specific needs. Without much time/effort to search for adequate parametrization for a particular country or sector, the consultant favours solutions that work "out of the box". In this case, the challenge for dissemination is to guarantee an adequate advertising of the data/model repositories and model documentation.

Key messages and storylines

Main messages to researchers: The EUCalc results, its code, the underlying databases and methodology are fully open and can be further used or modified for the purposes of improving your science.

Main messages to consultants: The EUCalc supplies a fully operational, EU member state based energy modelling solution that can be customized to suit your specific needs.

Tools

- Dedicated articles in visible scientific journals setting forward the main features of the EUCalc model, its underlying philosophy, methods, and, when available, final results;
- Elaboration of a special issue in a peer-reviewed scientific journal to condense in one access point the research highlights produced during the project time-frame;
- Outline of an international special report on European global carbon mitigation and trade-offs;
- Presence in scientific conferences and events (presentations, poster, sessions) using the partner networks;
- Meetings with sister projects (also funded under HORIZON 2020) dealing with similar questions, but using other modelling approaches;
- Presence in widely used newsletters such as ENERGY-L and CLIMATE-L from the International Institute of Sustainable Development (IISD), and DG Energy News;
- Advertising of model versions through the EUCalc website and linkages to social media and the above-mentioned newsletter;
- Invitation of researchers and consultants to participate in the EUCalc expert workshops to get feedback from scientific audiences with regard to certain ambition levels implemented in the European calculator on specific research topics, as well as disseminating the EUCalc project results achieved so far;
- Open access to the EUCalc database. A number of data repositories have been identified (see Del. 11.2), as well as meta-data standards that guarantee that data is easily discovered;
- Distribution of the EUCalc database through the partner's networks to promote its use in the scientific community;
- Final scientific conference planned at the end of the project that intends to bring together high-profile scholars from the field of energy and climate research and the EUCalc team for presenting the final products of the project.

Part II: Exploitation

The extent to which the EUCalc's products and results will be exploited, may be seen as an indicator of one important dimension of the project's success. It is in the consortium's interest, that as many actors as possible will use EUCalc's outputs to reach their respective goals.

Fortunately, the project is intrinsically designed to facilitate the exploitation of its main results through a strong stakeholder dialogue for the co-design of products, for example. Also, the products, such as the Transition Pathways Explorer, the My2050 Educational Tool, the Main Messages Publication or the MOOC Module, are instrument to disseminate and exploit research outcomes and to guide through the option space of viable pathways to reach sustainable, low-carbon European energy futures.

The EUCalc results and products are capable of opening opportunities for societal, political, scientific, as well as commercial exploitation. Project partners can exploit results themselves, or facilitate exploitation by others. 'Societal exploitation' includes raising awareness for the urgency of decarbonisation amongst pupils and students as well as providing means to civil society actors and pressure groups for arguing their agendas.

For exploitation to be successful, a vivid interest by stakeholders has to be generated in using the EUCalc model or derived products, which the consortium is trying to generate by, amongst other things, a continuous co-creation dialogue with stakeholders. A strong user interest, in turn, will make it easier to hold the model and the dependent products up to date after the end of the project. This is important since up-to-date data and tools are mandatory for sustaining user interest and for attracting the interest of potential future clients. The following chapter will deal specifically with the legacy of EUCalc products and its importance for exploitation.

From experience, the product quality may actually be the single most effective driver for successful exploitation. The model is slim, fast, transparent and comprehensive. It is granular enough to provide specific answers and dives deep enough to provide added value. For non-modelers, socio-economic indicators like jobs or life-expectancy may be of particular interest. The concise lever set for choosing ambitions helps getting started, documental and educational materials guarantee ease of use. Scientist may be interested in the instant and high-quality results or the linkage of calculator with a CGE model like GTAP. Policy makers may be interested in the possibility to

accelerate policy consultation in the future by the EUCalc model enabling the analysis of large option spaces to direct more complex models.

The main and most obvious risk for exploitation is missing engagement by project partners after the end of the project when the focus will be more on current projects. This holds for both scientific partners and SMEs, since both depend on continuous revenue. In this regard the exploitation strategy also aims at stimulating the reflection of the partners on how products and results can be designed to help reach the aim of the project on the one hand, but also how they can be reproducible in terms of a further beneficiary exploitation for the partners themselves. In other words: Exploitation will be successful if it can be identified as a win-win-situation for the single partners and is not seen as a burden or obligation. To sensitize partners to the benefits of further use and exploitation of project outputs we set up a questionnaire. The following considerations are based on the evaluation and analysis of the answers of the consortium.

The aspiration of this document is strategic and must be evaluated during the ongoing project. It will lead to and be the basis of The Exploitation Plan (Del.10.10). This plan will finally define all concrete measures, timing of exploitation and responsibilities. The exploitation plan will organise the exploitation process.

After dealing with the legacy of the project, we will list products and results and describe the various exploitation segments along the various partners and stakeholder groups most probably interested in associated products. The final section is dedicated to a closer look on the roles of partners in exploitation activities.

Legacy

This section presents ideas about how the consortium can guarantee continuity after the end of the project. It is mandatory for a satisfactory exploitation to draft credible strategies on how the maintenance of the technical infrastructure for the model will be upheld, how the model will be cultivated and updated and how the data will be kept up to date after the project is finished. Such scenarios are the basis for any credible proposal to stakeholders to use the model, its user interface, the Transition Pathways Explorer, or other derived products.

As soon as the web applications take a close-to-final form, the consortium will strive to find an NGO or foundation, an external business or a public body, to own and maintain the model and the web applications. Experience with developing the Global Calculator (the ownership of which has been given to the Chinese Energy & Resources Institute) nurtures optimism that it is possible to find such a European institution which will take on the responsibility to continue the maintenance of EUCalc's main products. Depending on the success of this first step, and facilitated by the open source character of the project, we imagine EUCalc's future to evolve along one of the following paths.

1. **Open source / free future:** In this vision, the new EUCalc technologies and tools will inspire other projects. These other projects leverage the open source dimension of EU- Calc if possible, as well as the various products developed during the project. While this option poses only marginal additional workload on the partners, it will also only ensure the least guarantee for and consistency in further development and maintenance of model, data and interface.
2. **Ecosystem:** In this vision, in addition to the 'open-source mode', EUCalc provides an ecosystem of tools which continues to be updated and improved. The ecosystem would include, for example, maintained and updated versions of
 - tutorials for users and for model developers;
 - scoping methodology documents;
 - the documentation of each module (list of sources, calculation tree);
 - functioning version of each module in KNIME (with clear documentation);
 - the Transition Pathways Explorer;
 - the MOOC module;

and, additionally, technical support to facilitate the use by other teams of the EUCalc ecosystem. In short, a "calc community" gathering the entire modelling community.

This option adds some workload requirements. One or more organisations need to provide the technical support, to update the developer's manuals, and potentially update some modules. This would be performed in a more decentralized manner than in the 'open-source / free future' mode.

3. **Framework:** In this vision, in addition to the 'ecosystem', the EUCalc provides the possibility to integrate the new inputs,

outputs and data in one single dataset. The objective would be to enrich the EUCalc EU28+1 version with further developments, such as additional countries and, potentially, other geographical scopes like regions and cities. In this case, other projects can contribute to

- adding other countries or regions;
- decomposing countries into regions and cities;
- refining the data for selected member states;
- enriching the EUCalc with additional functionalities / research areas;
- updating the data in EUCalc before and after 12/2019;
or
- updating the ambitions and add scenarios.

While there are already more than 20 calculators, the new EU-
Calc technology for the first time provides the possibility to have data for multiple geographic areas simultaneously and with different versions for each area. This means we could build a ‘framework’.

In terms of additional workload requirements, one or several organisations need to

- invest in developing the technology further;
- consolidate the requests for model development (this includes assessing improvements suggestions / bug correction, answering to other projects);
- maintain open source access to the KNIME modules, data and the updated version(s) of the consolidated model;
- provide frameworks to facilitate the discussion;
- maintain the development roadmap;
- interact with the EUCalc consortium on modifications and decisions (independently of the chosen governance);
- help other projects implement changes when they are approved, find bugs and upgrade the software platform if needed;
- support the development of closed source modules; or
- assess how changes to the model could affect results of previous work.

Being in a single framework places some constraints on the other projects (e.g. lever choices, time granularity). But it is unlikely that all geographical scopes, such as cities and countries, will be able to connect to the same combined framework.

During the remaining project lifetime, the team will assess the various exploitation potentials more precisely and define the steps required to materialize them. Contacts with governments and other public bodies, NGOs and foundations potentially willing to leverage the EUCalc will be exploited in order to decide about the way forward and specify it in the Exploitation plan, D10.10. The schedules for the upcoming project meetings will dedicate time to exploitation topics. The communication and dissemination team, together with CLIMACT and PIK, will prepare respective discussion topics and decision points.

Exploitable products and results and their value for different stakeholders

As products of the EUCalc project we define project outputs that need no further development, enhancement, adaptation or refinement by any user or stakeholder. Products of the EU-Calc project are readily available. As results we define those outputs that can be used as a reference, method or basis to build on or enhance other results or products. They are a kind of resource. Results will be processed by stakeholders in their contexts.

The key exploitable products and results are:

- the Transition Pathways Explorer;
- the harmonised database;
- the My Europe 2050 educational tool including associated videos;
- the background material;
- the KNIME and Python models;
- the assumptions documentation and manuals;
- the Massive Open Online Course MOOC module;
- the scientific methodologies developed and publications;

- the know-how collected and reworked; and
- the technologies matrix.

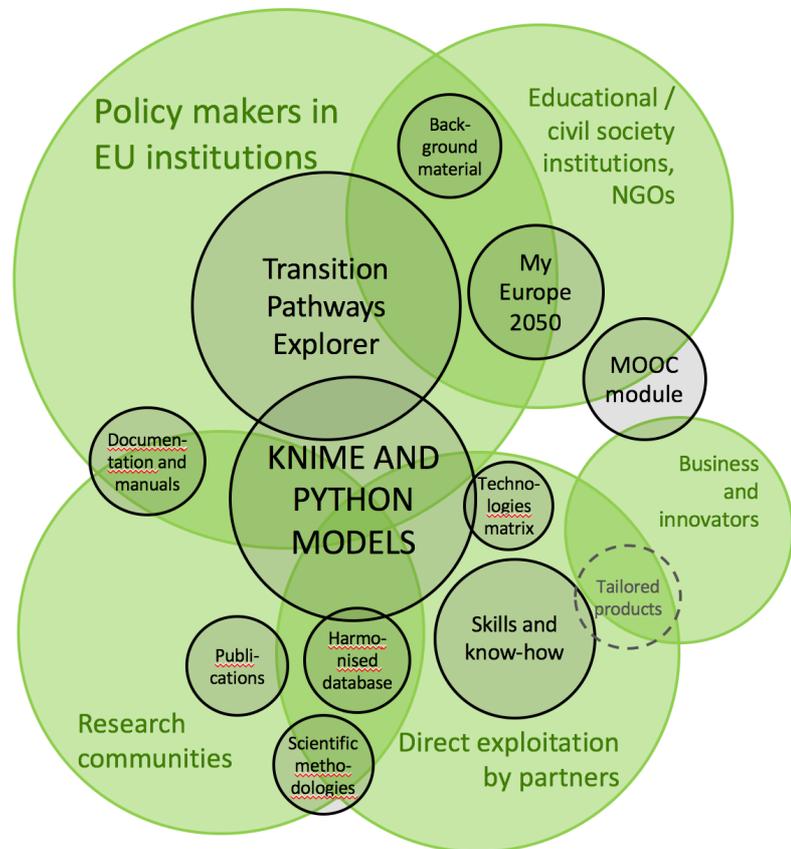


Figure 1: Exploitable products (small black circles) and the target groups those products are mostly aimed at (large green circles). The dashed circle exemplifies potential products that are out of scope of this project.

Societal exploitation

Products

- My Europe 2050 educational tool and associated videos
- MOOC module
- Transition Pathways Explorer
- Documentational / background material

Opportunities

By using the products derived from the EUCalc model, societal actors can explore the option space of viable sustainable

development pathways for Europe and, therefore, build scientifically grounded arguments for their agendas. As it won't be a model that can be used by experts only, the chance to reach a wider audience is given and intended. For scientists this implies also a big chance to hand over the knowledge they gained directly to a wider public and to decision makers and let them experience the importance and influence different decisions may have. Pupils and students will be taught by MOOCs, that integrated the EUCalc MOOC module, using data and findings provided by the EUCalc model and made accessible by the Transition Pathways Explorer. Schools can use the My Europe 2050 educational tool to teach the urgency of mitigation and possible pathways towards decarbonisation. Higher education institutions can use the Transition Pathways Explorer, as well as the open source code and the accessible database, for their own goals and reasons. All actors involved will benefit from the transparency, the accessibility and the comprehensibility of the EUCalc model.

Obstacles

It is crucial for all exploitation measures that the user is convinced that data and methodology of the model are credible and up to date. It is, hence, of utmost importance to deliver an accessible and comprehensive documentation and to update the database regularly. Moreover, the dissemination and communication efforts around the Transition Pathways Explorer, the MOOC module and the My Europe 2050 tool, must reach the stated goals for being accepted as educational tools.

Civil society actors must be informed of the product's existence and properly introduced into their usage. This can be started before the products are finally released near the end of the project. Optimally, though, this should be a continued effort and is, hence, asking for an engagement beyond the project's ending. Such engagement must be allocated and funded, which requires additional planning. Possible approaches to this end are sketched in the Legacy Section above.

CLIMACT, TUDelft and CMF are key partners in fostering societal exploitation. More detailed attribution of opportunities and roles to individual partner organisations are described in the role of partners section below.

Political exploitation

By targeting policy makers in European institutions, the outcomes of the EUCalc project shall inform discussion and long-term strategic European decision making with respect to decarbonisation of the European economy.

Products

- Transition Pathways Explorer
- The assumptions documentation and manuals and background material
- Tailored applications (to be produced outside the project's scope using EUCalc results)
- Training/consulting

Opportunities

Actors in the political field are constantly arguing for their respective agendas. Real time information about emission related results of political decisions can be of great help in political debates, be it in favour of one's own agenda or against the agendas of other actors. An easy check of upcoming decisions by using the EUCalc Transition Pathways Explorer may strengthen a politician's basis for his/her defensive or active argumentation. Establishing the Transition Pathways Explorer as a tool in everyday politics might seem to be an unattainable goal at first glance. Political consulting, interpreting and reporting of scientific results, however, being already widely used in spite of substantial costs, is nurturing hope of being able to add scientific input to political debates. Furthermore, and unlike existing calculators, the EUCalc model calculates socio-economic dimensions such as "jobs", and is thereby relevant in matters of the main issues of everyday political debates.

Consortium partners working in the field of political consulting are showing interest in using results of the EUCalc Pathway Explorer towards their clients, i.e. in designing new products and benefits for political actors based on scientific findings of the EUCalc model.

It may occur that specific questions of political actors will make it desirable to modify the model and/or its application. Such tailoring could be realised by well-informed consultants or by a structure maintaining the EUCalc after the project's ending (see Legacy Section).

The open source nature of the software produced, as well as the accessible database and documentation of the EUCalc project, allow deeper insights into the genesis of the results provided by the Transition Pathways Explorer. This superior transparency may become an additional help in arguing politically for or against agendas and respective upcoming decisions.

Obstacles

For political exploitation, a successful dissemination of the Transition Pathways Explorer into the political field is mandatory. Project partners working in this field are contributing to this goal by investing great efforts to get buy-ins from EU Institutions including DGs and MEPs. Their acceptance of the EU-Calc model depends for the most part on the scientific validity and soundness of the model, also after the end of the project. Therefore, maintenance, data- and software updates, as well as bug fixing and corrections in response to future input from the science community, are crucial for the credibility of the Transition Pathways Explorer. Decisions regarding a structure to provide these services beyond the project's ending, are still to be made. Suggestions are to be found under Legacy. Also, networks and established processes with political consulting might hinder politicians from using new tools and benefits. Not to forget competing models and applications, which may convince EU politicians of their own USPs and make them decide against the usage of the EUCalc benefits.

Scientific exploitation

The scientific achievements, the EUCalc consortium is striving for, that may be exploited by and for the scientific community, include

- slimming down energy-economic modelling to produce instant and high-quality results at the same time;
- opening the opportunity, by means of the speed of the model, for analysing complete option spaces for mitigation action and trade-offs necessary for particular pathways with respect to socio-economic impacts;
- exemplifying how a calculator model can be tied to an CGE model like GTAP;
- enabling a comparison of very different modelling approaches and, herewith, challenging various assumptions and hypotheses in case results differ significantly;

- accelerating scientific policy consultation by quickly finding the potentially most interesting questions to be analysed in more detail with more sophisticated modelling approaches; and,
- with all the above, eventually support the IPCC process.

Products

- Newly developed scientific methodologies
- the KNIME and Python models and the real-time Pathway Explorer
- the assumptions documentation and manuals
- the peer-reviewed scientific publications
- the PhD thesis made by staff members among the partners
- the harmonised database
- the scientific conference as final event, and
- the research network built up among the partners.

Opportunities

We consider scientific exploitation to foster progress in science-based knowledge. The EUCalc project develops a new approach in regard to emission impact modelling. Therefore, a new methodology and newly designed databases are needed as well as the scientific assumptions made in the model. This new approach must be discussed in the scientific community by publishing papers about the approach, assumptions made, databases, and of course also the model code. If everything is sound and convincing, the model can truly make a difference and become the first European user demand driven emission impact model.

Furthermore, the included scientific partners will strengthen their own profile and skills as researcher and also their career opportunities (e.g., by doing a PhD). Scientific papers are the foundation of scientific work, also presenting own results on scientific conferences and becoming part of the scientific community, developing new approaches, model coding, new data collections, and being part in the co-creation process offers a lot of opportunities, which can be used for follow-up projects, further developments of the model, or single topics researched on.

Obstacles

The main challenge will be to do all the work on modelling, documentation, and quality checking within the very tight timeline planned. Scientific work and its progress are hard to foresee; usually a lot of new questions will come up during the process and have to be solved. The more complex the model is, the harder it might become to find good solutions and make not too simplified assumptions. For sure not all aspects can be covered in a model, but this has to be decided and transparently shown. All this will need time for literature reviews and methodological theory building that has to be published. Furthermore, peer-review procedures are time-consuming processes and also slow down the speed in regards to publishing the results.

Thus, all partners included have to invest a lot of effort to end up with a proofed and well documented model to convince the scientific community as well as the intended users.

Market potential for commercial exploitation

To analyse the market opportunity, one has to ask for the unique selling point or value proposition in comparison to other “calculators” or similar projects’ output. First of all, there is the obvious characteristic that the model does not only include a single country but a whole Union of countries and the interlinkages between these countries, as well as between the Union and the rest of the world. This allows for turning the focus on a single country or on the entity.

Products

- Skills and know-how
- Technologies matrix and other self-sufficient parts of the EU-Calc model
- Scientific methodologies
- Tailored products
- The KNIME model

Opportunities

Based on the answers to the questionnaire by the consortium partners, it is expected that business consultancies will be the first and foremost to make commercial use of the EUCalc results. The specific business-related plans of project partners PANNON, CLIMACT and CMF are explained below in the Partners section. For consultants, the skills and the know-how resulting from both the work on the model as well as from the Transition Pathways Explorer itself, will enable the design of new benefits for their customers. Beside the consulting sector, large companies like IKEA have shown interest in the EUCalc model and its derived tools. It is, however, not possible to fully assess such interest as long as, e.g., the Transition Pathways Explorer is work in progress. It is likely that in order to answer large companies' questions, the model and the interface will need to be tailored to the specific needs of a large company's sector or field.

Obstacles

Large companies do have their own models and modellers. The EUCalc model must, therefore, provide added value to their existing set of strategic tools. Such added value may be the socio-economic parameters included in the EUCalc model, it may also be the relevance of the outputs of the Transition Pathways Explorer for European politicians.

Since consultants are striving for efficiency in their daily work, they may estimate other sources of knowledge than the EUCalc to be more helpful in the sense of usability and/ or effectiveness. The prerequisite for every scenario of commercial exploitation is the user's trust in the scientific reliability of the model and in its up-to-date data. This must be guaranteed by an according maintenance of the technical infrastructure and of the database (see Legacy).

Exploitation on partner level

Each partner has undertaken a first evaluation of the potential exploitation of results and resources developed through the project: while partners from an academic background are mainly planning to focus on the scientific exploitation of resources through the writing of publications and further enhancing the methods developed in future research activities (see scientific exploitation section above), other EUCalc partners are planning a more strategic exploitation of the tools and resources developed. These are described in the following. It should be considered that this is a collection of first ideas which

at a later stage will be further developed as soon as the main tools will be ready.

Companies (SMEs)

CLIMACT

CLIMACT is a consulting company serving governments, administrations, NGOs, collectivities and companies working on climate and energy issues, so EUCalc should support the company's activities and create new business opportunities.

In fact, one of the main aims of Climact is that EUCalc has a positive impact on policy making:

- First, at EU level on the upcoming National Energy and Climate Plans (NECPs), they have the ambition to support countries who would be interested to test their NECPs in a relatively direct and compelling way. Climact suggests working with the whole consortium to adapt EUCalc to handle as early as possible this functionality; this could lead to future projects with several consortium members.
- Second, Climact aims to support policy making by incorporating other dimensions into the model, e.g. a Sustainable Development Goals Calculator by Imperial.

In addition to this, the experience gained by creating the EU-Calc model will enhance the opportunities for Climact to work on further Calculators, e.g. for other countries, regional segmentations, third on new countries and regions, or for specific sectors or actors of society.

Another exploitation activity could be coaching to modelers in other regions on how to use energy models. This could be an activity implemented together with other EUCalc partners and will be further defined in the Exploitation plan.

Climate Media Factory

Integrating media practitioners, media experts and natural scientists, the Climate Media Factory is producing diverse media products for different target groups, like animated videos or e-learning applications, mainly in the field of sustainability and climate change. For many years they have been part of a big network of scientists as well as creative media practitioners. Experience with other calculators showed the importance of moderated processes for a successful dissemination of the models and their respective interfaces. Depending on further development of the EUCalc project, the Climate Media Factory will decide on developing consulting services as additional benefits for the target groups.

An important part of exploitation will be the use of the videos and tools produced during the EUCalc project as a reference, including presentations of the videos on festivals. As stand-alone products the videos will indicate our ability to communicate complex topics like transition in an easy and entertaining manner, thereby creating additional interest in the EUCalc Pathways Explorer and in the My Europe 2050 tool. The videos may attract institutions like NGOs, governmental institutions or scientific organizations. With further development of the EU-Calc model we will decide on adapting the idea and mechanism of the Pathways Explorer for large companies.

PANNON Pro Innovations Ltd

PANNON Pro Innovations Ltd. is an innovation management consultancy for small- and large-scale innovation projects related to sustainability, climate change, energy and the bio economy. PANNON Pro is member of Climate-KIC.

PANNON is interested to participate in all commonly implemented exploitation activities for the various EUCalc products. In addition, as main developer of the Energy model, it is planning to develop a service offer for storage services combined with renewable energy generation (of which development already established service) where there is definite interaction between the design of storage technologies and the balancing/storage module on national scale. However, for the service a down-scaled version is to be used working on individual consumer level (i.e. industrial facilities or municipalities). So, it is the modelling of balancing/storage in a down-scaled and adapted version which is individually owned.

PANNON, through its spin-off company Pannon Green Power Ltd. is already active in Photovoltaic (PV) project development targeting the municipal sector and offering win-win scenarios. This business offer is to be expanded with storage functions and project development.

T6 Ecosystems srl

T6 is providing services around the impact of research activities (mainly at an international level). This includes dedicated research activities (socio-economic impact assessments), management, dissemination and exploitation of research projects.

In EUCalc T6 is mainly supporting the management and dissemination activities of the project and with this helping the project to become a success.

T6 is extremely interested in exploiting the knowledge acquired during the project and to take advantage from the networking opportunities explored so far in order to enlarge future

research opportunities. Through the intense work with the consortium partners as well as through the expert consultations, new contacts could lead to new opportunities in terms of future projects in the field of climate change impacts and transition pathways.

Non-profit organisations and Think Tanks

BPIE

BPIE is a not-for-profit think-tank with a focus on independent analysis and knowledge dissemination, supporting evidence-based policy making in the field of energy performance in buildings throughout Europe and beyond.

BPIE will in particular use the EU Calculator project results and outputs relating to the building sector to support the implementation of the Energy Performance of Buildings Directive in EU member states. The results and outputs will be communicated to decision makers and influencers through a variety of communication channels, also with the aim to encourage the creation of similar calculation tools for the national level. In that sense, the Transition Pathways Explorer contributes by generating and comparing future energy scenarios and their socio-economic impacts.

BPIE will use the tool to help policy makers and consultants understand the interlinkage of buildings to the different sectors. The Transition Pathways Explorer outlines the role of the buildings as micro-energy hubs through their integration in the data flow, material/ resource flow and energy flow which are connected to the industry, agriculture and energy sectors and the lifestyle. This central role of buildings in the energy, material and data systems and in people's lives can potentially be deepened in succeeding projects that focus for example on the demand side response and storage function for the energy system.

Further, BPIE will use the results to inform its future work on economic valorisation of the multiple benefits of a zero carbon building stock, including developments of tools and methodologies. For example, the model can potentially be adopted for an integrated assessment of energy, health and productivity quantification across Europe where BPIE is laying the data and research basis with current projects.

On the global level, BPIE will inform the work of the Global Alliance for Buildings and Construction about the project results, and will use it as input for the development of regional roadmaps for the decarbonization of buildings. This will be implemented in collaboration with the IEA during 2019 and 2020.

In addition, BPIE will introduce and use EUCalc outputs and results to inform the Buildings Efficiency Accelerator project, a GEF funded project supporting cities in improving the energy performance of their building stock.

Finally, BPIE will use EUCalc results and outputs to contribute to the debate how to bring the buildings sector on an emission pathway which is compatible with the Paris Agreement.

ÖGUT

The Austrian Society for Environment and Technology (OGUT) is a non-profit organization, formed as a scientific platform for environment, economy and administration. The main focus at OGUT lies on "scientific competence in technological innovation and network" and "Environment and Technology".

At this stage, ÖGUT plans to promote the use of the EUCalc tools among Austrian policy and decision makers in the field of energy and climate, mainly those which are members of ÖGUT. ÖGUT plans to inform all members (more than 100) and directly get in touch with at least 5 high-Level organisations (Multipliers or decision makers) across all sectors for promote the use of the tools.

Based on the experience gained in EUCalc they could imagine to develop follow-up activities for enlarging the tools, e.g. in the field of Corporate Social Responsibility.

SEE Change Net

SEE Change Net is a regional sustainable development think tank whose mission is a sea-change in policy and practice, for sustainable development in South East Europe.

SEECN plans to use the Transition Pathways Explorer, working with European Union Institutions and in the process to create a core of trained/inducted specialists who advise EU Policy Makers in the Parliament and civil servants from the relevant DGs who understand the science underpinning the policy tool and how it relates to EU law. The experiences and new knowledge gathered during the project, especially with the co-ordination of the co-creation process, may form the basis of a new application to extended this research to encompass the accession countries of South East Europe.

Research Institutes and Universities

PIK

The Potsdam Institute for Climate Impact Research (PIK), is a non-profit research institute addressing crucial scientific

questions in the fields of global change, climate impacts and sustainable development. Therefore, it is mainly interested in using developed results in further research activities. In particular, PIK is contributing a Lifestyle module to the EUCalc model. This module will be used in future projects. The work on and with this module will lead to a number of scientific publications. Based on the findings from such work, a policy brief regarding changes in lifestyle could be prepared and disseminated to EU politicians.

During the next phase of the project it will be decided, if PIK will have another role in regard to the sustainability of the EU-Calc products and results. Being the coordinator, they might manage the exploitation of innovative methodologies, as defined in the DoA as well as in the Consortium Agreement.

TU Delft

TU Delft aims to use the results and the Transition Pathways Explorer to further study the social impacts of climate change mitigation efforts leading to new publications and research projects. In addition, TU Delft will use the results in education. TU Delft offers Massive Open Online Courses (MOOCs) under the name DelftX. TU Delft is member of the EdX Consortium. In EUCalc TU Delft is, among others, in charge of producing the MOOC module and the exploitation plan is targeted mainly on the wide promotion of the MOOC.

The objective is to get the module added to as many as possible relevant MOOC courses and to profile the MOOC with end-users. To do this it TU Delft will:

- make contacts at MOOC platform level, University level and write to course leaders to offer the module in which the explorer is explained and its use is demonstrated;
- send a message with a link to the module on YouTube/website to all identified end users including a request to share (snowball effect);
- Provide announcements texts for all partners to be included in any outputs (lectures, meetings, publications, websites).

Ecole Polytechnique Fédérale de Lausanne

The Ecole Polytechnique Fédérale de Lausanne (EPFL) is a higher education and research organisation, specialized in natural sciences and engineering. EPFL laboratories involved in EUCalc have energy-related research activities such as electricity supply technologies, energy system efficiency, energy storage, the water-energy nexus, or the economic impacts of

energy transition. EPFL laboratories bring technological and experimental expertise, as well as systemic methodologies allowing detailed energy integration and optimization studies.

EPFL will be using the EUCalc tools for both research and education purposes. For research, EPFL will in particular use the Transition Pathways Explorer to generate and compare future energy scenarios and their socio-economic impacts, with a particular focus on understanding the role of future energy technologies and the way a sustainable large-scale energy system can be optimised from a multi-criteria approach (cost, CO₂, energy independence, etc.). For education, they plan to use the various tools to help student understand the interlinkage between different energy sectors through interactive exercises and team work.

Imperial College London, University of Copenhagen, University of East Anglia

Imperial College London is a not-for-profit research institution and carries out leading cross-disciplinary, high-impact science, technology and policy research on climate change, environmental resources management, energy and sustainable transitions.

The University of Copenhagen (UCPH) is the largest institution of research and education in Denmark. The Department of Food and Resource Economics at UCPH carries out research in agricultural-, food-, natural resources- and environmental economics, as well as consumption, bioethics and governance. Within the scope of the EUCalc, its research focuses on the trade effects generated by the different decarbonization pathways.

The University of East Anglia is a not-for-profit research institution and with the Tyndall Centre it conducts high quality integrated climate change research in support of UK and international climate policy, contributing both to the theory and practice of sustainable solutions to the challenge of climate change.

These three project partners aim to use their module specific research results for the writing of publications, as the basis for future research activities and when relevant include these within the university curricula. They also aim to promote when possible the exploitation of the resources produced through the project to their networks and through their contacts with governmental and non-governmental organisations.

Monitoring and evaluation

Indicators and targets for monitoring and evaluation

In the first version of this document, Key Performance Indicators (KPIs) for each dissemination and exploitation channel were identified. For some, performance targets were defined according to what has been planned and indicated in the DoA, while for others the assessment implies a monitoring of the progress. This second version includes results from a first evaluation for the first 18 months (prepared for the 1st Periodic Technical Report) and defines exploitation KPIs in line with the exploitation strategy update. After 18 months the effectiveness and progresses of performed activities were analysed and, based on the results achieved, dissemination and communication activities were updated. In addition, some KPIs have been adjusted according to an update of planned activities on Dissemination and Exploitation.

The following table shows the Key Performance Indicators (KPIs) and the indication of the expected EUCalc performance. As written above, it is divided in Dissemination and Exploitation KPIs. For the dissemination KPIs the achieved numbers after 18 months are reported.

Table 2: Key Performance Indicators (KPIs) for the planned EUCalc Dissemination and Exploitation activities.

DISSEMINATION				
Dissemination activity	Methodology	Key Performance Indicator (KPI)	Target (end of project)	Performance until M18
Project website	Google analytics	No of total visits	3 000	366 (new users)
Newsletter		Registered recipients	200	50 (GDPR 33)
Stakeholder log	Stakeholder log	No of registrations in the EUCalc Stakeholder log	800	More than 500
Social media / Twitter	Twitter analytics Tweetchup Tweetdeck www.key-hole.co	No. of tweets using the #EUCalc hashtag	100	62
		No. of twitter campaigns	2	0

		No. of followers	200	89
Videos (Vimeo and YouTube)		No. of videos published	4	0
	Vimeo and YouTube analytics	No. of views per video	250	n/a
Media presence	Dissemination reporting (Excel)	No of articles/press releases published	5	0
		No of articles/press releases published on external channels	5	1
Events	Dissemination reporting (Excel)	No of external events attended by EUCalc partners	20	15
High-Level Launch event in Brussels		No. of attendees	80	0
Workshops & training	List of attendees	No. of participants in expert consultation workshops	200	82 external, 132 including EUCalc partners
	Evaluation questionnaire	Satisfaction level of workshop participants	4 (on a level 1-5)	4
Town Hall events	List of attendees	Number and type of industry participants in presentation of EUCalc tools	250	n/a
EXPLOITATION				
Exploitation activity	Methodology	Key Performance Indicator (KPI)	Target (end of project)	Performance until M18
Scientific Publications		No. of papers	5	0
Open source codes published		No. of codes	2	Model code is published with one git repository per

				module. 43.000 files in to- tal.
Projects which leverage the EUCalc methodologies (KNIME, assumptions documents) either on EU MS, or on other geographies		No. of person days worked on these projects	150	n/a
Transition Pathways Explorer	Web analytics package	No. of unique visitors	250	n/a
My Europe 2050		No. of pupils reached	500	n/a
MOOC		No. of participants	250	n/a
		Number of universities/institutes taking up the module	4	n/a

During the final quarter of the project a final evaluation will be carried out, which will feed into the final report. Regarding the KPIs on exploitation, it must be noted that the numbers will give only a first impression of results achieved, as exploitation will continue after the official end of EUCalc.

References

EUCalc (2017) Data Management Plan (Deliverable 11.2)

EUCalc (2017) Method for implementation of EUCalc co-design process (Deliverable 9.4)

EUCalc (2017) Stakeholder mapping (Deliverable 9.2)

EUCalc (2018) EUCalc Project website (Deliverable 10.3)

EUCalc (2018) Training and alignment workshop as kick-off of the expert consultation meetings (Deliverable. 9.3)

Appendix

Design briefing | Word and design mark for the main output tool of the EUCalc project (issued February 2017)

The EUCalc project will deliver an urgently needed comprehensive framework for research, business, and public-sector decision makers, which identify and enable an appraisal of synergies and trade-offs of feasible European decarbonisation pathways. EUCalc will provide a Transition Pathways Explorer, which can be used as a concrete planning tool for reconciling the urgent need for technological and societal change, against the associated inertia and lock-in effects. EUCalc will enable the EU's sustainability challenges to be addressed in a pragmatic and dynamic way without compromising on scientific rigour. It aims to become THE most widely used democratic European tool to check strategies for policy and decision-making.

Our product is giving the user of the tool the opportunity to explore the possibility space for viable low-carbon pathways towards a sustainable European future with respect to Energy, Food, Resources and Jobs.

In general

This document is a design brief for the Transition Pathways Explorer word and design mark. The result of this design process will be adapted for the visual design of the EUCalc project in general later.

Who's the targeted audience?

The most important target groups are policy makers like

- staff of the European Commission (in DG Environment, Agriculture, Climate-Action, Energy, Research),
- members of the EU Parliament and
- national policy makers

followed by private sector policy makers in the business community moderated through associations.

What tone or image do we need to portray? What attributes should be visible

- Empowering
- Result oriented / applicable

- Ambitious
- Self-explaining

Additional attributes

Simple, playful/interactive, clean, transparent, professional/sound, reliable, trustworthy, relevant, raising interest on individual level, showing different options,

Topical keywords

Decarbonisation, transformation, sustainable energy future, land use, future lifestyles, carbon calculator, do the math!, policy web tool, decision support, science-society interface

Preliminary name and claim of the tool

EUCalc – Explore sustainable European futures

How should it feel to use the tool?

Trustworthy, useful and informative, relevant, simple, but professional, easy to understand output, inspiring, realistic

What would we like the audience to think when viewing the overall tool?

- This is an interactive tool enjoyable to play around with (my input is going to be processed to give scientifically backed results)
- It is easy to handle and I can understand it with some effort.
- It is informative, not persuasive.

What makes the Pathways Explorer unique?

- Run own emission scenarios
- Brings complex models to an operational level
- Multi-dimensional
- large coverage
- simplicity
- real-time results
- complex enough to be authoritative
- simple enough to be used by non-expert policy makers

Who's our "competition"?

- Websites that depict results from more complicated and elaborate dynamic economic modelling approaches from other prestigious scientific organisations.
- In-house policy papers
- To a lesser extent, NGO campaigning messages

Initial mapping of multipliers

Multipliers to target the private sector (purveyors) (non-exhaustive list):

Organisation	Website
Business Europe	https://www.businesseurope.eu/
The European Business Network	http://ebn.be/
Eurochambers	http://www.eurochambres.eu/
Enterprise Europe Network	http://een.ec.europa.eu/
Association of European Transport	https://aetransport.org/

Multipliers to target the end-users (non-exhaustive list):

Organisation	Website
ICLEI	http://www.iclei.org/
EUROCITIES	http://www.eurocities.eu/
Climate Alliance	http://www.climatealliance.org/
Covenant of Mayors	http://www.covenantofmayors.eu/
EU Green Capitals	http://ec.europa.eu/environment/europeangreencapital/
CIVITAS	http://civitas.eu/
URBACT	http://urbact.eu/
Climate KIC	http://www.climate-kic.org/
Compact of Mayors	https://www.compactofmayors.org/
Transport, Traffic and Mobility	https://t2m.org/

Global Research Alliance on <https://globalresearchalliance.org/>
 agricultural greenhouse
 gases

Climate change, agriculture <https://ccafs.cgiar.org/>
 and food security

Related projects/initiatives with shared interest (non-exhaustive list)

Name	Website
CLARA	http://www.clara-project.eu/
CLARITY	http://cordis.europa.eu/project/rcn/210518_en.html
PROSNOW	http://cordis.europa.eu/project/rcn/210511_fr.html
VISCA	http://cordis.europa.eu/project/rcn/210173_en.html
NACLIM	http://www.naclim.eu/
RAMSES	http://www.ramses-cities.eu/
MARCO	http://marco-h2020.eu/
EU MACS	http://eu-macs.eu/
Climateurope	https://www.climateurope.eu/
BINGO	http://www.projectbingo.eu/
RESIN	http://www.resin-cities.eu/
RESCCUE	http://www.resccue.eu/
EU-CIRCLE	http://www.eu-circle.eu/
RAIN Project	http://rain-project.eu/
EPICURO	http://www.epicuronetwork.eu/
Smart Mature Resilience	http://smr-project.eu/home/
Global Framework for Climate Services	http://www.gfcs-climate.org/
Copernicus Climate Change Programme – UrbanSIS & SECTEUR	https://climate.copernicus.eu/
Climate-ADAPT	http://climate-adapt.eea.europa.eu/
Climate Services Partnership	http://www.climate-services.org/

Group on Earth Observations (GEO)	http://www.earthobservations.org/index.php
JPI Climate	http://www.jpi-climate.eu/home
World Climate Research Programme (WCRP)	https://www.wcrp-climate.org/
INTEND	http://cordis.europa.eu/project/rcn/212035_en.html
CHEERS	http://cordis.europa.eu/project/rcn/212033_en.html
PLANET	http://cordis.europa.eu/project/rcn/211953_en.html
EnergySequence	http://cordis.europa.eu/project/rcn/210960_en.html
SPACE	http://cordis.europa.eu/project/rcn/210907_en.html
InBetween	http://cordis.europa.eu/project/rcn/211928_en.html
Hi-TermCap	http://cordis.europa.eu/project/rcn/211977_en.html
HyBuild	http://cordis.europa.eu/project/rcn/211655_en.html
Plan4Res	http://cordis.europa.eu/project/rcn/211955_en.html
Carbon Footprint	https://www.carbonfootprint.com/calculator.aspx
Carbon Footprint calculator	https://www3.epa.gov/carbon-footprint-calculator/

Initial mapping of Twitter accounts

Examples of relevant Twitter accounts (non-exhaustive list):

Account	Organisation name	Account type
@IANPHIhealth	The International Association of National Public Health Institutes (IANPHI)	End-user network (Climate & Health)
@IBPSA	International Building Performance Simulation Association (IBPSA)	End-user network (Building Energy)

@EUROCITIEStweet	Eurocities Network	End-user network (Emergency Planning), Multiplier (city network)
@ICLEI	ICLEI	End-user network (Emergency Planning), Multiplier (city network)
@ICLEI_Europe	ICLEI Europe	End-user network (Emergency Planning), Multiplier (city network)
@ECTP_CEU	European Council of Spatial Planners	End-user network (Urban Planning)
@eumayors	Covenant of Mayors	Multiplier (city network)
@c40cities	C40 network of world's megacities	Multiplier (city network)
@MayorsAdapt	Mayors Adapt	Multiplier (city network)
@Mayors4Climate	Global Covenant of Mayors	Multiplier (city network)
@energycities	Energy cities network	Multiplier (city network)
@WRIncities	WRI Sustainable Cities	Multiplier (city network)
@ERRINNetwork -	ERRIN, the European Regions Research and Innovation Network	Multiplier (city network)
@ICLEI_ResCities	Resilient Cities forum on urban resilience and adaptation	Multiplier (city network)
@100ResCities	100 Resilient Cities	Multiplier (city network)
@EU_ecoinno	EASME	Multiplier (EU/UN)
@EU_ClimateAction	DG CLIMA	Multiplier (EU/UN)
@CLIMARIEU	DG CLIMA	Multiplier (EU/UN)
@EU_EESC	EESC	Multiplier (EU/UN)
@EUSciComm	Promoting #EUSciComm news and views, not EU affiliated	Multiplier (EU/UN)
@EITeu	European Institute of Innovation and Technology (EIT)	Multiplier (EU/UN)

@EU_Social	DG EMPL	Multiplier (EU/UN)
@STLBarrillon	Estelle Bariollon, DG Re- search & Innovation	Multiplier (EU/UN)
@EUSciencelnnov	DG Research & Innova- tion	Multiplier (EU/UN)
@euclimateadapt	Climate ADAPT plat- form	Multiplier (EU/UN)
@MAC_europa	Miguel Arias Cañete	Multiplier (EU/UN)
@EUSmartCities	EIP-SCC Market Place	Multiplier (EU/UN)
@urbe21	URBE21	Multiplier
@EU_GreenCapital	EU Green Capital	Multiplier
@CCRECEMR	The Council of Euro- pean Municipalities and Regions (CEMR)	Multiplier
@URBACT	URBACT – European ex- change and learning programme promoting sustainable urban de- velopment	Multiplier
@GeorgeFergusonx	People & Cities initia- tive	Multiplier
@ClimateKIC	Climate-KIC	Multiplier
@EuroGeosciences	European Geosciences Union	Multiplier
@weADAPT1	weADAPT platform (SEI)	Multiplier
@EUBIC	European Business Net- work (EBN)	Multiplier (private sec- tor)
@BusinessEurope	Business Europe	Multiplier (private sec- tor)
@EUROCHAMBRES	The Association of Eu- ropean Chambers of Commerce and Indus- try	Multiplier (private sec- tor)
@EEN_EU	Enterprise Europe Net- work EU	Multiplier (private sec- tor)
@marco_h2020	Marco	Related project
@EUMACS_H2020	EUMACS	Related project
@imprex_eu	IMPRES	Related project
@EU_BINGO	BINGO	Related project
@climateurope	Climateurope	Related project
@EDgE_C3S	EDgE	Related project
@sophieproject	SOPHIE Project	Related project
@ClimateNewsDay	Climate News Network	Media

@Blueland1	Climate Change Post	Media
@guardianeco	Guardian Environment	Media
@TR_Foundation	TR Foundation News	Media
@YourIS_com	YourIS	Media
@innopathsEU	Innopaths	Sister Project
@IPCC_CH	IPCC	Multiplier
@UNEP	UN Environment	Multiplier
@greenbudget_EU	Green Budget Europe	Multiplier
@EU_ENV	EU Environment	Multiplier
@ICARUSEU2020	ICARUS	Related project
@ClairCity	ClairCity	Related project
@AirPollSurrey	Global Centre for Clean Air Research	Multiplier
@iSCAPEproject	iSCAPE	Related project

Account	Network/multiplier	#likes
@be.vvsg	vvsg	2,227
@ICLEIworld	ICLEI World	1,739
@EnterpriseEuropeNetworkEU	Enterprise Europe Network (EEN)	11,345
@EuropeanRegions	Assembly of European Regions (AER)	3,416
@EuropeanGreenCapitalAward	Official European Green Capital Award	6,485
@EUClimateAction	Climate Action	28.500
@EU_ENV	EU Environment	36.000
@IPCC_CH	IPCC	95.000
@UNFCCC	UN Climate Change	430.000
@thecarbontrust	The Carbon Trust	56.000

Partners' Twitter accounts:

Organisation account	Personal account
@PIK_Climate	@J_P_Kropp
@imperialcollege	
@climact	
@OEGUT	
@T6Ecosystems	@AlePrampolini

@uni_copenhagen

@EPFL_en

@uniofeastanglia

@ClimateMedia

@T6Ecosystems

@SEECChangeNet

Initial mapping of Facebook or Linkedn accounts

Partner	account	# likes
PIK	https://www.facebook.com/PIKPotsdam/	777
Imperial	https://www.facebook.com/imperialcollegelondon/	156.500
Climact	https://www.linkedin.com/company/climact	546
BPIE	https://www.facebook.com/BPIEeu https://www.linkedin.com/company/buildings-performance-institute-europe-bpie/	565 1.103
UCPH	https://www.facebook.com/universitet https://www.linkedin.com/school/3540/	5.700 155.000
EPFL	https://www.facebook.com/epflcampus https://www.linkedin.com/school/3883/	71.000 65.000
UEA	https://www.facebook.com/ueaofficial	88.000
PAN-NON	https://www.linkedin.com/company/climatekiccen-tralhungary/ https://www.facebook.com/klimainnovacio/	146 3.700
CMF	https://www.facebook.com/climatemediactory	490
T6ECO	https://www.linkedin.com/company/t6-ecosystems-srl/	66
SEECN	https://www.facebook.com/SEECChangeNet	1.500
TU Delft	https://www.facebook.com/TUDelft/ https://www.linkedin.com/school/166529/	60.700 137.000

Initial mapping of channels on how to reach EU target groups

Format	Item
Publications	Horizon Magazine
	Project stories
	research*eu results magazine
	research*eu focus
	Newsletters

Audiovisual	Futuris Magazine - EuroNews
Events	Events on Commission's Research & Innovation website Events on the CORDIS website
Online news	Headlines on Commission's Research & Innovation website CORDIS Wire

Initial mapping of events where EUCalc could be disseminated

Event	Date & place	Participating partner	Dissemination activity
Meetings of working group EC group on Horizon 2020 Commission Expert Group - High-level Panel of the European Decarbonisation Pathways Initiative (EDPI)			
Cities and climate change science conference	5-7 March 2018 Edmonton, Canada	PIK	Presentation
Landscape 2018 - Frontiers of agricultural landscape Research https://glp.earth/news-events/events/landscape-2018-frontiers-agricultural-landscape-research	12-16 March 2018 Germany	TBC	TBC
Transport Research Arena - http://www.traconference.eu/	16-19 April 2018		
Climate change: impact and responses - http://on-climate.com/2018-conference	20-21 April Berkeley		
EU Green Week 2018: Greener cities for a greener future	21-25 May 2018 Brussels, Belgium	TBC	TBC
Energycon 2018 - http://www.energycon2018.org/	3-7 June, Cyprus		
ICCCGW 2018: 20th International Conference on Climate Change and Global Warming - https://waset.org/conference/2018/10/paris/ICCCGW	29-30 October 2018 Paris		
GHGT-14	October 2018		

http://www.ghgt.info/		Melbourne		
European Week of Regions and Cities 2018	TBC	Brussels, Belgium	TBC	TBC
EU Mobility Week 2018			TBC	TBC
Assembly of European Regions (AER) event in 2018	TBC		TBC	TBC
Advanced building Skins conference	TBC, 2019		TBC	TBC

