



**CoCo2**

Prototype system for a  
Copernicus CO<sub>2</sub> service

# Media and Communication Plan

Daniel Thiemert

[coco2-project.eu](http://coco2-project.eu)



Co-ordinated by  
 **ECMWF**





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Copernicus CO<sub>2</sub> service

## D9.4 Media and Communication Plan

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# CoCO2: Prototype system for a Copernicus CO<sub>2</sub> service

Coordination and Support Action (CSA)  
H2020-IBA-SPACE-CHE2-2019 Copernicus evolution –  
Research activities in support of a European operational  
monitoring support capacity for fossil CO<sub>2</sub> emissions

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# 1 Executive Summary

D9.4 Media and Communication Plan provides the baseline for outreach and media work for the CoCO<sub>2</sub> project.

Communication activities will be developed and implemented across the life of the project, to support it, facilitate interaction and disseminate its milestones and deliverables. It is expected that project partners support the communication activities to ensure the maximum visibility within the various communities. The various annexes of this document will be updated during the lifetime of the project.

This Plan offers an overview of how and when Communications activities will help and support CoCO<sub>2</sub> in meeting its objectives.

The plan contains:

- The Media and Communication strategy including Objectives, Audience Mapping, and Script;
- Templates for Deliverables, Reports and Presentations;

This document has to be seen as a living document which will need to be responsive to the developments within the CoCO<sub>2</sub> project and outside.

## 2 Introduction

### 2.1 Background

To support EU countries in assessing their progress for reaching their targets agreed in the Paris Agreement, the European Commission has clearly stated that a way to monitor anthropogenic CO<sub>2</sub> emissions is needed. Such a capacity would deliver consistent and reliable information to support policy- and decision-making processes.

To maintain Europe's independence in this domain, it is imperative that the EU establishes an observation-based operational anthropogenic CO<sub>2</sub> emissions Monitoring and Verification Support (MVS) capacity as part of its Copernicus programme.

The CoCO<sub>2</sub> Coordination and Support Action is intended as a continuation of the CO<sub>2</sub> Human Emissions (CHE) project, led by ECMWF. In the Work Programme, ECMWF is identified as the predefined beneficiary tasked to further develop the prototype system for the foreseen MVS capacity together with partners principally based on the CHE consortium. In addition, ECMWF will continue some of the work initiated in the VERIFY project as well.

The main objective of CoCO<sub>2</sub> is to perform R&D activities identified as a need in the CHE project and strongly recommended by the European Commission's CO<sub>2</sub> monitoring Task Force. The activities shall sustain the development of a European capacity for monitoring anthropogenic CO<sub>2</sub> emissions. The activities will address all components of the system, such as atmospheric transport models, re-analysis, data assimilation techniques, bottom-up estimation, in-situ networks and ancillary measurements needed to address the attribution of CO<sub>2</sub> emissions. The aim is to have prototype systems at the required spatial scales ready by the end of the project as input for the foreseen Copernicus CO<sub>2</sub> service element.

## 2.2 Scope of this deliverable

### 2.2.1 Objectives of this deliverable

Communicating effectively and efficiently is an important factor in the impact realisation for the CoCO<sub>2</sub> project. It helps reaching the right audience with the right message.

D9.4 describes the media and communication plan for the project, outlining the strategy, plan and evaluation metrics. It provides guidelines and templates for communication. The plan will be revised throughout the project lifetime to ensure that it is responsive to the developments within the project and externally.

### 2.2.2 Work performed in this deliverable

As per the Description of the Action, the work performed included developing templates, guidelines as well as the communication strategy.

### 2.2.3 Deviations and counter measures

No deviations were encountered.

## 3 Media and Communication Strategy

### 3.1 Background

CoCO<sub>2</sub> is a flagship EU project aimed at developing prototype systems at the required spatial scales ready by the end of the project as input for the foreseen Copernicus CO<sub>2</sub> service element.

CoCO<sub>2</sub> is a consortium of 25 organisations and companies, with ECMWF as lead coordinator for the project, which will run for 36 months until the end of December 2023.

Its outcomes will sustain the development of a European capacity for monitoring anthropogenic CO<sub>2</sub> emissions. Therefore, it should be treated as high profile, with a lot of pressure and authoritativeness and prestige riding on it for all involved. The topic area is one that continues to attract substantial academic, industrial and political attention, and more importantly is acknowledged to be one of the most important challenges of our time (supporting the UN Sustainable Development Goal – 13 Climate). Communications will need to be clear, concise and compelling while not diminishing academic and scientific rigour. The CoCO<sub>2</sub> project is not a classic scientific endeavour as it involves direct dialogue with the European Commission (e.g. via its Task Force). However, all the key ingredients of a quest for an improved understanding of a complex scientific phenomenon that benefit experts and laymen alike are constituents.

CoCO<sub>2</sub> as a project aims at firing the ambitions of the individual, the expert teams and linking the policymakers to cover a set of key objectives:

1. Deliver prototype anthropogenic CO<sub>2</sub> emission estimation systems at global, regional and local scales;
2. Engage with user communities to co-design a service portfolio that ensures fitness-for-purpose of the prototype systems;
3. Develop methodologies to assess the propagation of uncertainties within the system as well as of the outputs resulting in an Evaluation and Quality Control framework;
4. Provide first inputs to the global stocktake process in time for the 1st global stocktake in 2023;
5. Provide recommendations for the operational implementation of the CO<sub>2</sub>MVS within the Copernicus programme.

As such it is a potent project to support the Paris Climate Agreement ambitions that were emanated from the COP21 conference in December 2015.

### 3.2 Communication Objectives

All stakeholders are to be kept informed of the creation and development and achievements of the project, understanding how they will benefit from it and how they can support it.

#### a. Strategic Communication Objectives

To clearly communicate:

- The critical importance of the project
- The urgency surrounding the undertaking
- Its challenging and compelling nature

#### b. Operational Communication Objectives

To bring together the relevant European (and international) expertise in a consolidated and collaborative manner to build an operational CO<sub>2</sub> emission monitoring capacity.

### 3.3 Audiences

We have seven key external audiences - based on the audience mapping of the precursor CHE project. Below is a grid that positions them alongside the channels we will use to reach them, the information we will communicate and the products we will produce.

**Table 1: CoCO<sub>2</sub> Audience Mapping**

	<b>STAKEHOLDER</b>	<b>CHANNELS</b>	<b>INFORMATION</b>	<b>COMMUNICATION</b>
1	Intermediaries, Task Force, Member States, and Policy Makers  CoCO <sub>2</sub> External Expert Group CoCO <sub>2</sub> Inventory Agency Advisory Board	Workshops Reports Strategic research Policy briefs CoCO <sub>2</sub> website CoCO <sub>2</sub> Twitter	Scientific/technical General progress	Presentations Project news and newsletters Tailored updates on website Tweets, posts and blogs Media coverage Press releases
2	Scientific Community - World Meteorological Organisation (WMO) - Global Climate Observing System (GCOS) - World Climate Research Programme (WCRP) - European Geophysical Union	CoCO <sub>2</sub> data portal Workshops Bespoke roundtables Conferences Universities and research institutes CoCO <sub>2</sub> Twitter, Private social media Media interviews Shared digital platform ResearchGate	Scientific/technical Data products General progress	Presentations Project news and newsletters Peer-reviewed scientific papers Tweets, posts, blogs Media coverage Press releases Links to/on other project/ programme websites
3	Climate Change Community - Intergovernmental Panel on Climate Change (IPCC) - National climate change government-	Key stakeholder meetings and events	Scientific and technical information on process, data and outputs	Project news, updates and meetings



	advisory bodies (e.g. UK Climate Change Committee; Germany's Climate Service Centre Germany)			
4	Industry - World Business Council for Sustainable Development - World Economic Forum - Country level government departments for business	Bespoke roundtables Workshops/roadshows CoCO2 website CoCO2 Twitter, Key stakeholders' events	Scientific/technical General progress	Project news and newsletters Targeted publication material Tweets, posts, blogs Media coverage Press releases
5	Local and regional government, politicians + city mayors	Bespoke roundtables Workshops/roadshows CoCO2 website CoCO2 Twitter, Media interviews	Scientific/technical General progress	Project news Newsletters Targeted publication material Tweets, posts, blogs Media coverage Press releases
6	Space Agencies and Technology Providers, to be researched and defined	Conferences and fairs CoCO2 website CoCO2 Twitter	Scientific/technical General progress	Newsletters Targeted publication material
7	General Public (to be defined and segmented) Schools Universities and Think Tanks, to be researched and defined	Media interviews and engagement CoCO2 website CoCO2 Twitter Workshops/roadshows	Scientific/technical General progress	Project news Newsletters Education modules (where possible) Targeted publication material Media coverage Press releases

### 3.4 Implementation

Guiding principles:

- We will exploit CoCO<sub>2</sub>'s bespoke digital resources (e.g. website, social media) alongside existing assets to achieve maximum impact at minimum cost.
- We will harness the engagement, interest and enthusiasm of our stakeholders to amplify the impact of our communications.
- We will take full advantage of established activities and events (e.g. conferences, workshops) to share our message.
- We will retain a sharp focus upon the core CoCO<sub>2</sub> objectives.

Communicating effectively and efficiently is an important factor in realising the impact of the CoCO<sub>2</sub> project. It will help the project to reach the right audience with the right message.



CoCO<sub>2</sub> communication activities will address the interaction with current stakeholders and promote the project to potential new stakeholders and the general public. **The CoCO<sub>2</sub> website and data portals will be the main repositories for the project documentation and related news.**

Project description, news items, listing of main events, description of results and products will all be covered through the CoCO<sub>2</sub> website. The website will be maintained by ECMWF with input from the consortium partners.

The target audiences identified for CoCO<sub>2</sub> include intermediaries, European Commission, EU Member States, CO<sub>2</sub> Task Force, space agencies, industry, and technology providers, the science community outside the consortium, climate community, and the general public.

Working closely with stakeholders, CoCO<sub>2</sub> will utilise the expert communicators of the ECMWF communications department as well as its Copernicus Department to ensure a high visibility of the project in the sector and among the wider audience, promoting the added value of this European collaboration.

We will communicate and promote **scientific and technical results** through:

- a. Scientific Publications
- b. Conference Talks
- c. Organised Workshops, providing updates on the project results
- d. Reports to and feedback from Committees and Boards

Both the scientific and technical achievements and findings within the CoCO<sub>2</sub> project will be advertised and disseminated through the project website and portal, which will contain all reports and technical documentation, publications in the scientific literature, publications in conference proceedings and links to the relevant data portals.

Strong engagement with the academic sector will promote the work performed in CoCO<sub>2</sub> and at the same time follow the scientific developments taking place outside the consortium. This exchange of information and knowledge will be realised through attendance at scientific conferences, organising sessions devoted to CoCO<sub>2</sub> and related topics at international conferences such as the annual meeting of the European Geophysical Union for instance, or the UN Conference of Parties, and by the general process of CoCO<sub>2</sub> scientists attending and presenting seminars and engaging in discussion at universities and research institutes. Such large events (EGU, UN CoP, etc) will receive specific coverage via the CoCO<sub>2</sub> website, with dedicated highlights on presentations made by CoCO<sub>2</sub> partners.

Scientific results from CoCO<sub>2</sub> will also be conveyed to international programmes and bodies such as the Global Climate Observing System (GCOS), the World Climate Research Programme (WCRP), and the World Meteorological Organisation (WMO). In this regard, there is also a key role envisaged for the CoCO<sub>2</sub> External Advisory Board (i.e. European Commission's CO<sub>2</sub> Task Force), External Experts Group, which consists of many European and international experts, as well as the Inventory Agency Advisory Board. Apart from providing feedback on the CoCO<sub>2</sub> developments, these experts will also establish links with many other international initiatives related to the future monitoring of CO<sub>2</sub> emissions. Progress and results will also be directly shared with the European Commission.

We will communicate and promote **the products of CoCO<sub>2</sub>** through dissemination of:

- e. Datasets and accompanying material (e.g. descriptions, meta data)
- f. Algorithms
- g. Graphics and animations (especially with the visual potential of high-resolution graphs and videos)

The products of CoCO<sub>2</sub> will comprise reports, graphical displays, datasets and improved methods, algorithms and code. All these elements have their own important role. Reports are mostly targeted at informing the Commission and its Task Force on assessments, innovation progress and future directions. Graphical displays, where applicable, are targeted at all users as supportive information for the various model runs, method comparisons, and input datasets. The datasets will also target a wide user community to support them with parallel or alternative studies. Finally, improved methods, algorithms and code (including their documentation) are meant to form the basis for follow-on development after the CoCO<sub>2</sub> project has finished.

Reports will be openly available from the public pages of the central CoCO<sub>2</sub> website. To increase its visibility, the CoCO<sub>2</sub> website will be linked on the websites of ECMWF, CAMS, C3S, and other partners.

All mature data products of CoCO<sub>2</sub> will be made publicly available to maximize the uptake by the scientific community. It is envisaged to make use of three parallel data portals to ensure full visibility of the datasets. These data portals will be based on the ICOS Carbon portal, the Global Carbon Atlas and the Copernicus Atmosphere Data Store, which is currently being implemented by the Copernicus Atmosphere Monitoring Service (CAMS). The steps undertaken by CoCO<sub>2</sub> towards building a European Platform for Monitoring CO<sub>2</sub> anthropogenic emissions contribute directly to this operational requirement.

We will communicate and promote **the progress of CoCO<sub>2</sub>** through provision of:

- h. Newsletters (digital and print)
- i. Public Deliverables
- j. Dissemination Materials (brochures, posters, flyers)
- k. The Media
- l. Stakeholder Engagement

The **wider scientific community and policy makers** will be able to use the CoCO<sub>2</sub> website to follow the progress of the project. All deliverables that are published in the form of reports will be hosted on the website. A news slot on the website will draw attention to highlights such as new data deliveries and reports, eye-catching developments, and so forth. Our social media activity will seek to drive traffic to the website, as well as sharing our news more widely to relevant, targeted audiences.

Because CoCO<sub>2</sub> will use existing modelling and inversion infrastructure (after further improvement where needed) to develop a future emission monitoring system, important outputs of CoCO<sub>2</sub> will consist of various detailed reports, designs and prototype components.

Although various developments within CoCO<sub>2</sub> will be based on pre-existing technology and will be realised through developing integrated technology, these developments will be shared publicly through proper documentation, either through public project documents (e.g., the Functional Requirements Specification Documents (FRSDs) in WP6) or through articles in the peer-reviewed literature. Sharing this information publicly will support the implementation of the future Copernicus CO<sub>2</sub> emission monitoring service element, which is normally done through competitive Invitations To Tender.

There may in addition be some exploitation of CoCO<sub>2</sub> products in the other activities undertaken by partners in the consortium operating CoCO<sub>2</sub>, in particular at the national level.

Broader audiences – namely, **industry, local government, and the general public** – will be targeted from the outset of the project, not only through the website, social media, events and newsletters, but also through communications specifically tailored for them.

To this end, **media coverage** should be encouraged and not restricted to scientific and trade journals but should also target international and national quality press such as The Economist, WSJ, Handelsblatt, Le Monde, El Pais, Financial Times and Forbes, as well as broadcast and

digital media. Driving consistent coverage about CoCO<sub>2</sub> will underpin communications to all stakeholder groups, and will build a sense of shared understanding and excitement that will further support the efforts of policy makers and scientists.

**Engaging stakeholders and their networks**, we will seek to encourage them to develop and disseminate their own materials, while ensuring they remain consistent with our key messaging and meet project objectives.

### 3.5 Messaging

The main strategic objective is **to clearly communicate the critical importance of the project, the urgency surrounding the undertaking, and its challenging and compelling nature**. Communications will therefore convey **the importance and gravitas** of CoCO<sub>2</sub> and the **excitement and pride** felt by those involved in the project, in a way that is appropriate to all stakeholders from seasoned policy makers and senior scientists to more general audiences of school children and the media.

The operational level objective of CoCO<sub>2</sub> is equally clear: **to bring together the relevant European expertise in a consolidated and collaborative manner to build an operational CO<sub>2</sub> emission monitoring capacity**. This objective includes strengthening interaction and links between expert communities, and encouraging the innovation needed to reconcile the scientific challenges implicit in building that capacity.

Both the strategic and operational objectives are core to the positioning of the project. From the beginning, both objectives should be integral in the messaging developed, ensuring that CoCO<sub>2</sub> is able to command respect, professional buy-in and investment of time and goodwill among specific stakeholder groups (especially scientists, industry and policy makers), while at the same time inspiring, articulating and leading the case for change.

### 3.6 Measurement

Measuring progress against defined objectives will be key to providing assurance on the delivery of success, enabling corrective action where required.

We will undertake both a quantitative and qualitative approach to measuring stakeholder awareness and perception of the CoCO<sub>2</sub> project and review updates of the relevant data on a six-monthly basis through a **stakeholder opinion survey**.

Already, deliverable D9.1 Risk and Quality Management Plan identified targets relevant for communication and dissemination, as follows:

**Table 2: Media and Communication Metrics**

<b>Metric Definition</b>	<b>Unit of Measure</b>	<b>M12</b>	<b>M24</b>	<b>M36</b>
Visibility of the Public Project Website	Number of Website Access in per month	300/400/500	1000/1500/2000	3000/4000/5000
Scientific and technical presentations	Number of presentations (in scientific events, conferences, trade fairs, congresses, symposiums)	2/4/6	3/5/7	4/6/8

Scientific publications	Number of peer-reviewed publications	1/2/3	4/5/6	9/10/11
Generic Communications from the project	Number of written and electronic papers / articles / publications	5/7/9	5/7/9	10/13/15
Availability of Public Relations material	Number of Project PR Material released in previous year	3/5/7	3/5/7	3/5/7
Official Press Communications from the project	Number of News Releases in previous year	3/5/7	3/5/7	5/7/9

### 3.7 Timeline

The timeline follows what has already been reported in D9.3 Dissemination and Exploitation Plan, identifying important events and activities during the lifetime of the project.

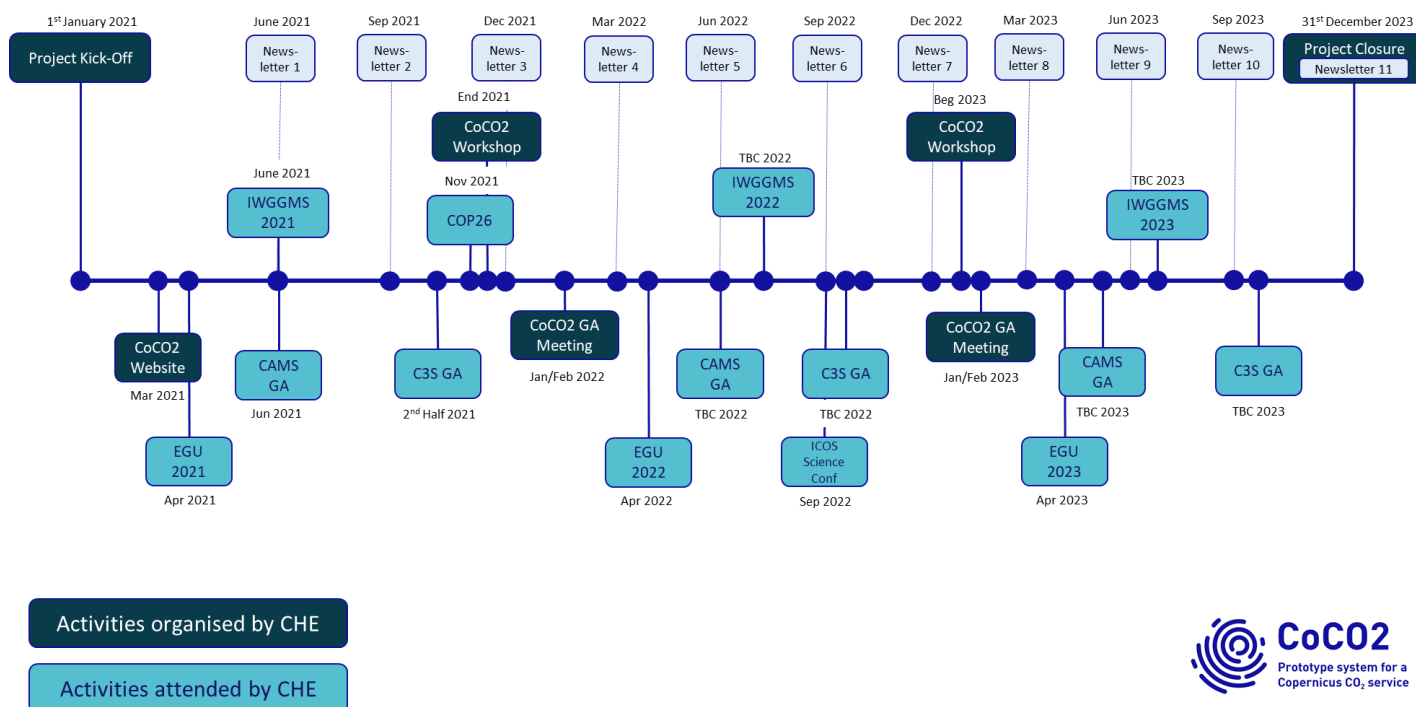


Figure 1: Timeline

### 3.8 Script

The CoCo2 project – developing a prototype system for a Copernicus CO<sub>2</sub> service

The CoCO<sub>2</sub> project will deliver the prototype for a new European anthropogenic CO<sub>2</sub> emissions monitoring and verification support (CO<sub>2</sub>MVS) capacity that can be implemented as a pre-operational service within the EU Copernicus Earth observation programme.

By 2026, the Copernicus anthropogenic CO<sub>2</sub> monitoring service is expected to be fully operational, delivering consistent and reliable information to support policy and decision-making as part of Europe's commitment to address climate change.

The main role of the CoCO<sub>2</sub> project is to do the challenging research and development work needed in preparation for such an operational system, building on previous projects and the recommendations of the European Commission's CO<sub>2</sub> Task Force.

CoCO<sub>2</sub> is co-ordinated by ECMWF, runs for 3 years from 2021 to 2023 and has a budget of 9 million Euros. The project consortium is made up of 25 partners from 14 European countries.

The project will work closely with ESA and EUMETSAT and link to existing Copernicus infrastructure, in particular, the Copernicus Atmosphere Monitoring Service (CAMS), the Copernicus Marine Environment Monitoring Service (CMEMS), the Copernicus Land Monitoring Service (CLMS), and the Copernicus Climate Change Service (C3S).

### **Supporting global, EU and national climate policy**

The Paris Agreement under the United Nations Framework Convention on Climate Change, adopted by nearly 200 countries across the world, aims to **limit global warming** to well below 2, **preferably to 1.5 degrees Celsius**, compared to pre-industrial levels<sup>1</sup>.

The Paris agreement calls on countries to set their own plans and targets to limit greenhouse gas emissions, known as Nationally Determined Contributions (NDCs), and also establishes a global stocktake every 5 years to evaluate progress. The first global stock take will happen in 2023. Under the Paris Agreement, the EU has committed to zero net emissions of greenhouse gases by 2050<sup>2</sup>.

To independently assess progress towards these climate targets, an objective way to monitor anthropogenic CO<sub>2</sub> emissions is needed, which provides consistent and reliable information. It is seen as critical therefore, that the EU establishes an *observation-based* anthropogenic CO<sub>2</sub> emissions monitoring and verification support capacity as part of the Copernicus Earth observation programme.

### **Key objectives of the CoCO<sub>2</sub> project**

- Deliver prototype systems to estimate anthropogenic CO<sub>2</sub> emissions at global, regional and local scales, including their uncertainties.
- Provide input to the first global stocktake under the UNFCCC Paris Agreement in 2023.
- Provide recommendations for the operational implementation of the monitoring system within the Copernicus programme.
- Build on previous work and collaborate widely.

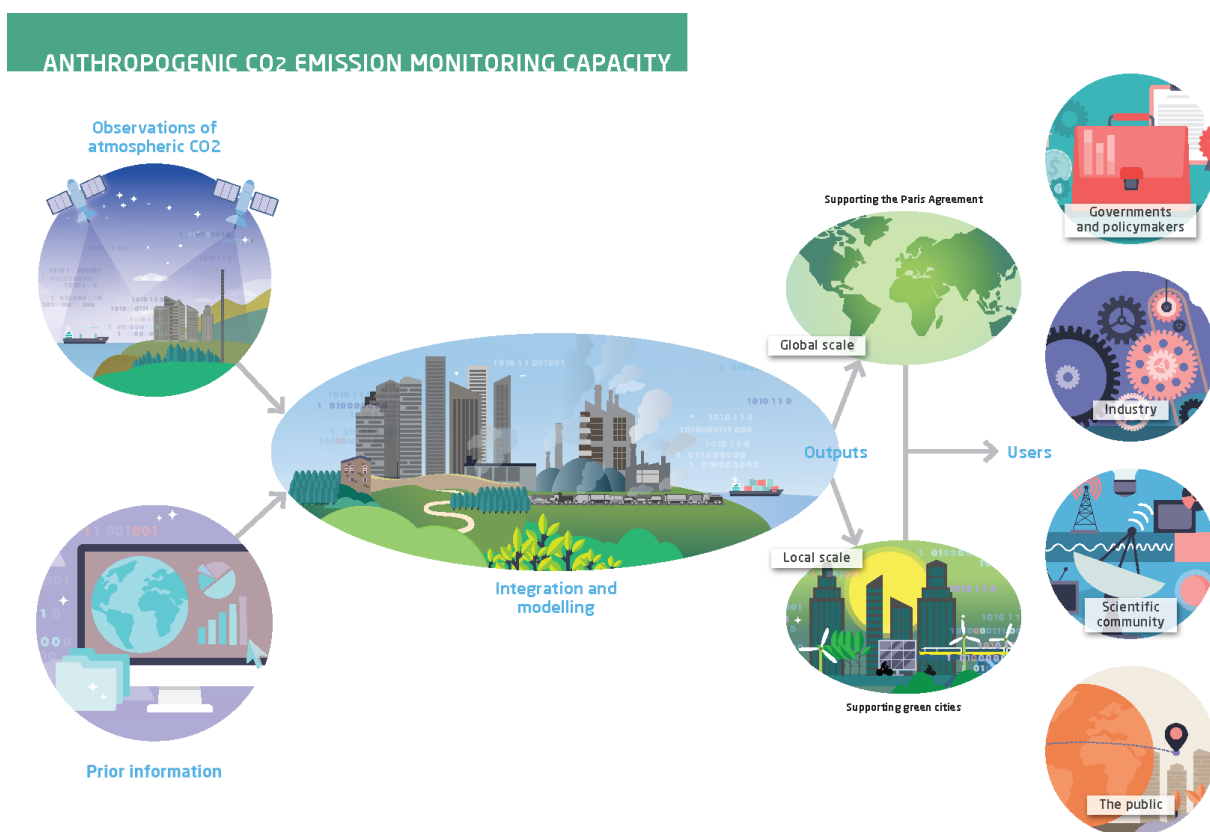
### **Main elements of the project**

The prototype systems being developed in the CoCO<sub>2</sub> project will estimate anthropogenic emissions of CO<sub>2</sub> using satellite and in-situ observations, as well as other data, combined with detailed computer simulations of the atmosphere and biosphere. This combination of observations and modelling will provide a system to monitor CO<sub>2</sub> emissions in much more detail than has been possible previously, but it represents a major challenge.

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<sup>1</sup> <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

<sup>2</sup> [https://ec.europa.eu/clima/policies/strategies/2050\\_en](https://ec.europa.eu/clima/policies/strategies/2050_en)



**Figure 2: The main elements of the proposed anthropogenic CO<sub>2</sub> emissions monitoring capacity.**

The main elements of the proposed observation-based, anthropogenic CO<sub>2</sub> emissions monitoring capacity:

- OBSERVATIONS
- PRIOR INFORMATION
- INTEGRATION & MODELLING
- OUTPUT & DECISION SUPPORT

### **Observations**

Being an observation-based system, data from both satellite and in-situ instruments observing various parts of the Earth system (atmosphere, land surface, ocean) will be the main input to the CO<sub>2</sub> monitoring and verification support capacity.

The CoCO<sub>2</sub> project will prepare the ground for new and highly accurate CO<sub>2</sub> satellite monitoring capabilities being developed by ESA and EUMETSAT as part of the Copernicus Sentinel programme. This new generation of satellite instruments will measure CO<sub>2</sub> in the atmosphere once every 3 days (at mid-latitudes), with a horizontal resolution of 4 km<sup>2</sup>.

Coincident measurements of NO<sub>2</sub>, which act as a proxy for plumes of freshly emitted CO<sub>2</sub> from power plants and cities, will also be included and could significantly increase the accuracy of the inferred CO<sub>2</sub> emission estimates.

In-situ (or ground-based) measurements are also critical. They are required for calibrating and validating satellite measurements, assimilation into models, validating and further improving process models, and evaluating output. Data will include ground-based measurements of atmospheric CO<sub>2</sub> and greenhouse gas fluxes. The project will also consider radiocarbon information that can be used as a tracer to measure anthropogenic CO<sub>2</sub> emission signals.



The project aims to set up a prototype data pipeline to connect the relevant data streams with the data assimilation and modelling system and with the capabilities to function in a near real-time, operational set up.

### ***Prior information***

Another important input to the monitoring system will be knowledge that we already have on emissions and natural fluxes of CO<sub>2</sub>. Such 'prior information' comes from national emission inventories and data on agriculture, forestry and other human activities, for example.

The main limitation of current emission inventories is that they are based on nationally reported data that become available with a lag of at least 2 years. The project will investigate the potential to estimate or model emissions using other sources of information that are available in near-real time (e.g., temperature, wind, and (potentially) human activity data). The project will also further develop the quantification of temporal and vertical emission profiles.

### ***Integration and modelling***

One of the key challenges is that global-scale observations do not directly measure the variables that are of key interest, i.e., the anthropogenic emissions of CO<sub>2</sub>. The use of detailed computer models of the Earth system that represent the sources, sinks and transport of CO<sub>2</sub> in the atmosphere aims to address this challenge. The modelling approach will work backwards to connect CO<sub>2</sub> atmospheric concentrations to their surface sources and sinks.

Specialised development of ECMWF's Integrated Forecasting System (IFS) will provide the core of the system, coupled with high-resolution, localised (inverse) models of greenhouse gas transport. Advanced data assimilation techniques will blend observations and prior knowledge with simulated emissions and fluxes, in order to keep the model state and observations consistent. The prototype systems will need to accurately process observational information at the scale of individual plumes with very high detail, as well as process the enormous amount of observational information in an efficient and accurate way.

The monitoring system needs to provide information on CO<sub>2</sub> emissions across the globe in near-real-time monitoring mode, plus accurate annual estimates and trends. It will be able to disentangle anthropogenic emissions from natural carbon exchange and improve attribution of CO<sub>2</sub> signals to individual processes (e.g., land-use change) or sectors (e.g., shipping or power plants).

### ***Output and decision support***

Transfer of information into user-friendly formats is critical for the success of the Copernicus CO<sub>2</sub> monitoring and verification service. Interaction with the user community to help design this interface is therefore a fundamental element of CoCO<sub>2</sub>, including: representatives from the United Nations Framework Convention on Climate Change (UNFCCC), the European Commission, EU member states, the national entities in charge of managing Nationally Determined Contributions, cities and regions, science, industry and the finance sector.

### ***Impacts of the project***

CoCO<sub>2</sub>, building on previous related projects and activities, represents a key step towards the development of a European monitoring and verification support capacity for anthropogenic CO<sub>2</sub>.

By 2026, this capacity is expected to be operational as a Copernicus service, delivering consistent and reliable information to support policy and decision-making as part of Europe's commitment to the UNFCCC Paris Agreement. Being the first to provide this kind of comprehensive and operational service will allow Europe to support developments of a similar nature within intergovernmental frameworks, such as UNFCCC or WMO.

A European anthropogenic CO<sub>2</sub> monitoring capacity will:



- Support the policy sector at global, European, national and local scales.
- Help countries develop their own monitoring capabilities and evaluate their CO<sub>2</sub> emission reduction strategies and Nationally Determined Contributions under the UNFCCC Paris Agreement.
- Stimulate business uptake, align closely with the European Commission's Green Deal, and help to develop a thriving green economy.
- Make a key contribution to the scientific community.

### The project consortium

The CoCO<sub>2</sub> Consortium (Figure 3) is comprised of 25 partners from 14 European countries (Germany, Netherlands, France, Switzerland, Italy, United Kingdom, Sweden, Norway, Portugal, Poland, Cyprus, Spain, Greece, Finland). Partners represent a mixture of research and international organisations, an SME and a number of operational centres.

Through ECMWF, the reach is extended beyond these countries due to the member and cooperating states of this international organisation. This extended reach will be further enhanced by ensuring that institutes from member states outside the consortium are invited to the workshops organised by the CoCO<sub>2</sub> project, thus ensuring that this initiative will be truly European and relevant capacity is built in all regions of Europe.

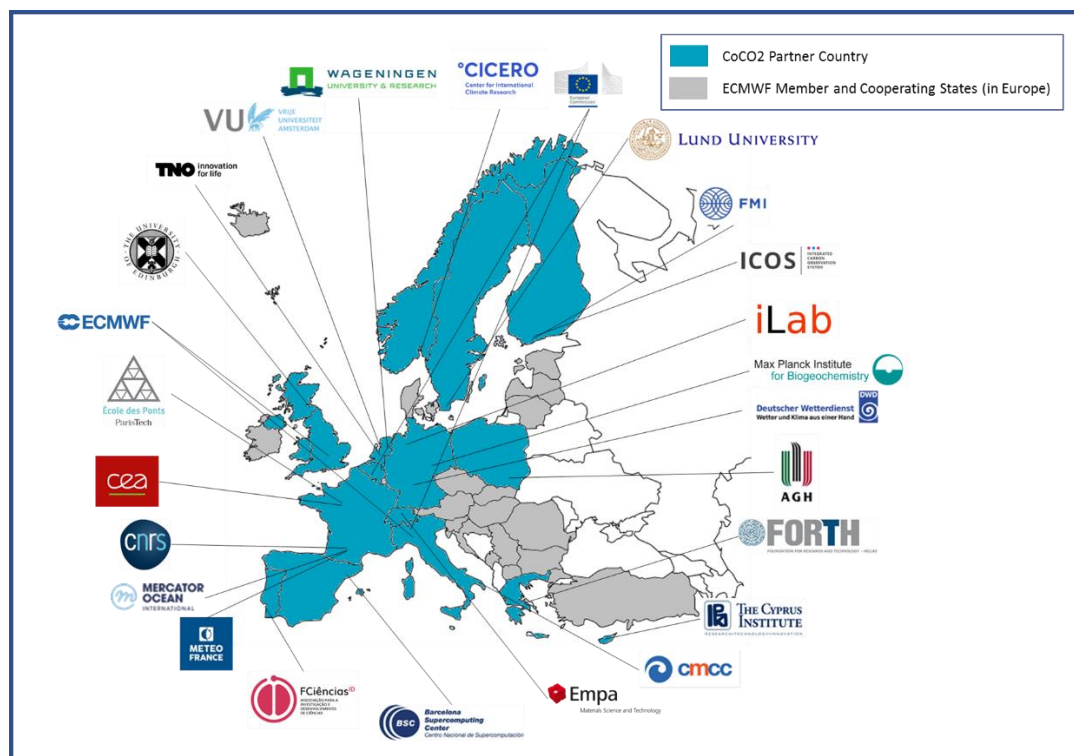


Figure 3: The CoCO<sub>2</sub> consortium

CoCO<sub>2</sub> will strongly collaborate with the European Commission and its CO<sub>2</sub> Task Force, the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the CO<sub>2</sub> science community, and the Copernicus Services.

CoCO<sub>2</sub> will also align as much as possible with development plans that have been defined within the World Meteorological Organisation (WMO), the Committee on Earth Observation Satellites (CEOS), WMO's Global Climate Observing System (GCOS) programme and the intergovernmental Group on Earth Observations (GEO).

## 4 Templates

A number of templates have been developed, including Deliverable, Report and PowerPoint templates. These are available to project partners via the internal project wiki.

### 4.1 Deliverable Template



**DN.M TITLE**

Dissemination Level: Public/ Confidential

Author(s): Name (Organisation)

Date: dd/mm/yyyy

Version: 0.1

Contractual Delivery Date: dd/mm/yyyy

Work Package/ Task: WPX/ TY Z

Document Owner: Organisation

Contributors: Organisations

Status: Draft/ for Review/ Final



## CoCO<sub>2</sub>: Prototype system for a Copernicus CO<sub>2</sub> service

Coordination and Support Action (CSA)  
H2020-IBA-SPACE-CHEZ.2019 Copernicus evolution –  
Research activities in support of a European operational  
monitoring support capacity for fossil CO<sub>2</sub> emissions

Project Coordinator: Dr Richard Engelen (ECMWF)  
Project Start Date: 01/01/2021  
Project Duration: 36 months

Published by the CoCO<sub>2</sub> Consortium

Contact:  
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The CoCO<sub>2</sub> project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958927.



CoCO<sub>2</sub> 2021

### 1 Executive Summary

Executive summary providing a stand-alone overview of the document and summarising its results

### 2 Introduction

#### 2.1 Background

#### 2.2 Scope of this deliverable

##### 2.2.1 Objectives of this deliverables

##### 2.2.2 Work performed in this deliverable

##### 2.2.3 Deviations and counter measures

### 3 Heading 1

Body text (Arial - 11 - Justified)

- Bullet Point level 1 acedia consedi tempore, od quam sunt. Itam et occus mossin.
- Bullet Point level 2 acedia consedi tempore, od quam sunt. Itam et occus mossin.
- Bullet Point level 3 acedia consedi tempore, od quam sunt. Itam et occus mossin.

#### 3.1 Sub heading 2

##### 3.1.1 Sub Heading 3

##### 3.1.1.1 Sub Heading 4

##### 3.1.1.1.1 Sub Heading 5

<REPORT NAME>

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CoCO<sub>2</sub> 2021

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### Tables

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CoCO<sub>2</sub> 2021



Figure 1: Caption Example (right-click on image -> "Insert Caption")

Table 1: Example Table

Table heading			
Table text			

Example Footnote<sup>1</sup>

### 4 Conclusion

Provide a summary of the document including impact of the results on future work (in CoCO<sub>2</sub> and outside CoCO<sub>2</sub>).

### 5 References

<sup>1</sup> Footnote text

<REPORT NAME>

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CoCO<sub>2</sub> 2021

**Document History**

Version	Author(s) Name (Organisation)	Date dd/mm/yyyy	Changes

**Internal Review History**

Internal Reviewers Name (Organisation)	Date dd/mm/yyyy	Comments

**Estimated Effort Contribution per Partner**

Partner Organisation	Effort effort in person month
<b>Total</b>	0

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## 4.2 PowerPoint Template































**Period: January 2021 – December 2023**




**CoCO<sub>2</sub>**  
 Prototype system for a Copernicus CO<sub>2</sub> service

**With support from:**

- CO<sub>2</sub> Monitoring Task Force
- External Expert Group
- Inventory Agency Advisory Board
- CoCO<sub>2</sub> reviewers
- REA



CoCO<sub>2</sub> – Prototype system for a Copernicus CO<sub>2</sub> service 2




**CoCO<sub>2</sub>**  
 Prototype system for a Copernicus CO<sub>2</sub> service

# THANK YOU

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 [coco2-project.eu](http://coco2-project.eu)  
 [@CoCO<sub>2</sub>\\_project](https://twitter.com/CoCO2_project)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 955927.



## 5 Conclusion

This deliverable has developed the initial media and communication plan for the CoCO<sub>2</sub> project, defining strategy, objectives, audiences, and script, and setting out how the success of the media and communications can be measured.

Whilst this provides a good starting point for the engagement activities of the CoCO<sub>2</sub> project, it nevertheless needs careful reflection and updating when appropriate to ensure that new developments (technical as well as strategy) within the CoCO<sub>2</sub> project and beyond are well reflected by the communication and media interactions.

## Document History

Version	Author(s)	Date	Changes
0.1	Daniel Thiemert (ECMWF)	08/04/2021	Initial Version
1.0	Daniel Thiemert (ECMWF)	27/04/2021	Final Version

## Internal Review History

Internal Reviewers	Date	Comments
Richard Engelen (ECMWF)	21/04/2021	Approved with comments
Gianpaolo Balsamo (ECMWF)	22/04/2021	Approved with comments

## Estimated Effort Contribution per Partner

Partner	Effort
ECMWF	0.25
<b>Total</b>	<b>0.25</b>

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