

CO₂ Value Europe

The new European Association dedicated to CO₂ Utilisation

FAQ for prospective members

September 2017

1.	ABOUT US	. 3
	WHAT IS UNIQUE ABOUT CO2 VALUE EUROPE?	. 3
	WHY CREATE A NEW ASSOCIATION?	
	What do we call CO₂ Utilisation?	
	WHAT IS OUR MISSION?	
	WHAT IS OUR COMMITMENT TOWARDS CLIMATE CHANGE MITIGATION?	
	How do we position CO ₂ Utilisation vs. Carbon Capture & Storage (CCS)?	. 4
2.	HISTORY	. 5
	WHAT TRIGGERED THE CREATION OF THE ASSOCIATION?	. 5
	WHO IS BEHIND THE CREATION OF THE ASSOCIATION?	. 5
	How was the creation of the Association funded?	. 5
3.	OBJECTIVES, ACTIVITIES AND SCOPE	. 6
	WHAT ARE OUR STRATEGIC OBJECTIVES AND PRIORITY ACTIVITIES?	
	WHAT IS OUR SCOPE?	
	WHAT WILL BE THE FIRST TOPICS ON WHICH THE ASSOCIATION WILL WORK?	_
4.	GOVERNANCE	. 7
	WHAT IS THE LEGAL STRUCTURE OF THE ASSOCIATION?	7
	WHAT ARE THE GOVERNANCE BODIES OF THE ASSOCIATION?	
	WHAT ARE THE GOVERNANCE BODIES OF THE ASSOCIATION? WHAT WILL BE THE COMPOSITION OF THE BOARD OF DIRECTORS?	
	WHAT WILL BE THE COMPOSITION OF THE BOARD OF DIRECTORS! WHAT WILL BE THE COMPOSITION OF THE SECRETARIAT (PERMANENT STAFF)?	
	WHAT ARE THE MAIN COSTS AND REVENUES OF THE ASSOCIATION?	
	WHAT IS THE EXPECTED YEARLY BUDGET OF THE ASSOCIATION?	
5.		
	WHY SHOULD I BECOME A MEMBER?	0
	WHO CAN BECOME A MEMBER?	
	WHO CAN BE FULL OR ASSOCIATE MEMBER?	
	WHAT IS THE ROLE OF ACADEMIA AND RESEARCH INSTITUTIONS ?	
	WHAT ARE THE MEMBERSHIP FEES?	
	WHAT ARE THE RIGHTS AND OBLIGATIONS OF MEMBERS?	
	HOW WILL MEMBERS BE CONCRETELY INVOLVED IN THE ACTIVITIES OF THE ASSOCIATION?	_
	CAN DIFFERENT COMPANIES FROM THE SAME SECTOR JOIN CO ₂ VALUE EUROPE?	
	IF I WANT TO JOIN, HOW SHOULD I PROCEED?	10
	WHOM CAN I CONTACT FOR MORE INFORMATION?	10



1. About us

What is unique about CO2 Value Europe?

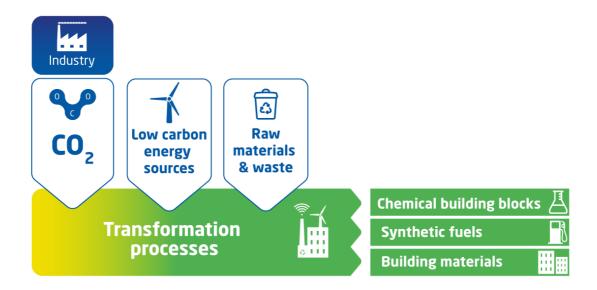
Unlike other collective organisations which are typically working in parallel on several topics, we are 100% dedicated to CO2 utilisation, so we will not be distracted by other priorities. We are also the only association which gathers stakeholders from all the relevant sectors of the CO2 value chain: CO2 emitters from all significant process industries, providers of decarbonated energy, industrial gas experts, transformation technology providers, and users of CO2-based products.

Why create a new association?

With the growing interest for CO₂ Utilisation, a significant number of existing collective organisations have started to include this topic in their scope of activities. In this context, there is an emerging need for the CO₂ Utilisation community in Europe to speak with one voice and to build up an integrated vision of what it could achieve together. CO₂ Value Europe has been established precisely to play that coordination and integration role, so that the resources of all industrial sectors can be leveraged efficiently in one direction.

What do we call CO₂ Utilisation?

CO₂ Utilisation is a broad term that covers all established and innovative industrial processes that can transform CO₂ into a variety of value-added products such as chemical building blocks, synthetic fuels or building materials. Most reactions to transform the CO₂ molecule require an additional energy input, which must come from a low-carbon source. CO₂ Utilisation is also sometimes called CO₂ Transformation or CCU (for Carbon Capture and Utilisation).





Why is CO₂ Utilisation important for Europe?

We believe that CO₂ Utilisation can be one of the major growth areas in Europe's future low carbon economy by:

- Offering solutions to reduce the carbon footprint of hard-to-decarbonize sectors such as energy-intensive process industries or transportation;
- Sequestering CO₂ permanently in building materials produced by carbonation of mineral waste:
- Offering an alternative, non-fossil feedstock for the chemical industry;
- Offering energy storage options which can facilitate the transition of EU energy systems.
- Providing revenues to fund the upscaling of carbon capture & storage (CCS) projects;

What is our mission?

Our mission is to promote the development and market deployment of sustainable industrial solutions that convert CO₂ into valuable products, in order to contribute to the net reduction of global CO₂ emissions and to the diversification of the feedstock base.

What is our commitment towards climate change mitigation?

Our mindset is that CO₂ Utilisation should only be promoted and developed if and when it brings a positive contribution to climate change mitigation. When joining the Association, all members will therefore be requested to sign the following Membership Charter:

MEMBERSHIP CHARTER

By joining the Association and signing this Charter, the members:

- Recognize that anthropogenic global warming is a reality and that CO₂ emission mitigation is one of the largest and most serious challenges facing the world
- Are committed to pushing forward measures and actions related to CO₂ Utilisation technologies that contribute to the transition towards a low-carbon emission society as agreed in the COP21 Paris objectives
- Will collectively define a strategic roadmap for CO₂ Utilisation aimed at reducing net global CO₂ emissions to the maximum extent possible within realistic industrial constraints
- Will promote sustainable solutions that effectively contribute to a net reduction of global CO₂ emissions based on accepted LCA standards

How do we position CO₂ Utilisation vs. Carbon Capture & Storage (CCS)?

While we all agree that we urgently need to transition to a low carbon society, the use of fossil energy sources (in particular natural gas) will nevertheless continue to be required for several decades. Carbon Capture and Storage (CCS) solutions must therefore be developed to mitigate CO₂ emissions from large stationary sources. CO₂ Utilisation should be developed in parallel with CCS for situations where it can provide specific benefits (see question: "Why is CO2 Utilisation important for Europe?") and/or where CCS is not an option.



2. History

What triggered the creation of the Association?

From 2013 to 2016, the European Commission funded a Horizon 2020 project called SCOT (Smart CO₂ Transformation), which demonstrated that the development of CO₂ Utilisation could bring significant benefits for Europe and its industry. It also concluded that coordinated collective action is essential to accelerate its market development.

Who is behind the creation of the Association?

Building on the strong enthusiasm generated during the SCOT project, an exceptional consortium of 29 partners assembled together in January 2017 to prepare the creation of CO₂ Value Europe. The consortium includes large industry leaders from across the CO₂ value chain, as well as top research organizations and industrial clusters.

13 Multinational industry leaders			
Cement	Cemex, HeidelbergCement, Lafarge-Holcim		
Chemicals	Solvay, Total		
Equipment	CMI Group		
Industrial gases	Air Liquide, Praxair, SIAD		
Lime	Carmeuse, Lhoist		
Power & Energy	Engie, Total		
Waste Management	Suez		
5 Specialized SMEs			
Atmostat, Carbon8 Systems, Carbon Recycling International, Sunfire, Econic 7 Research Organisations			
			ECN, IFP-EN, ICIQ, University of Sheffield, VITO, VTT
Clusters			
Axelera, Dechema, GreenWin, Port of Antwerp			

How was the creation of the Association funded?

In addition to their in-kind contribution, the 29 partners of the initial consortium paid a voluntary fee (\leq 15.000 for large industrial players, \leq 5.000 for others) to cover the preparation costs, because they strongly believed in the need to create the Association. Additionally, in July 2017, 7 founding industrial partners committed to pay anticipatively their upcoming fees as members of CO₂ Value Europe, in order to cover the start-up costs of the Association.



3. Objectives, activities and scope

What are our strategic objectives and priority activities?

The Association is structured around 3 main objectives:

- Vision: We will define a strong collective ambition for the development of the complete CO₂ Utilisation value chain over the medium/long term. This will include preparing an integrated Research and Innovation (R&I) roadmap with input from our members and from relevant partner organisations. This roadmap will serve as a reference to guide EU/national funding and will be implemented in close interaction with existing Public Private Partnerships (PPPs) such as SPIRE, BBI and Fuels Cells & Hydrogen.
- Advocacy: We will stimulate the development of a favourable regulatory framework at the national and European levels, by conducting advocacy actions to influence the design of regulations and policies, and by participating to the development of key methodological standards (e.g. for life cycle assessments applied specifically to CO₂ Utilisation projects).
- Ambassador: We will raise awareness and acceptance among policy makers and funders by becoming the representative of the CO₂ Utilisation community in Europe.

What is our scope?

- Core scope: The heart of our activities lies in the transformation processes that convert CO₂ into valuable products (both chemical and biological transformation routes). We focus also on the access to low carbon energy (electricity and hydrogen) and to relevant raw materials and waste.
- **Peripheral scope:** We will also pay attention to CO₂ capture, purification and transportation with the objective to define CO₂ specifications for the different utilisation applications and to reduce the costs of CO₂ supply. Over the longer term, the development of Direct Air Capture (DAC) is part of our vision.
- Out of scope: The direct uses of CO₂, such as for greenhouses, drinks or enhanced oil recovery (EOR), are not in our scope because they are mature technologies which do not involve a transformation of the CO₂ molecule.

What will be the first topics on which the Association will work?

During the first year of the Association, members will be invited to get involved in Working Groups on the following topics:

- 1. Regulatory Affairs & Industrial Policies (influence the development/revision of policy instruments such as: the Emissions Trading Scheme (ETS), Renewable Energy Directive (RED), the Fuel Quality Directive (FQD), Clean Energy and Waste directives;
- 2. Strategy: definion of an integrated Research & Innovation roadmap;
- 3. External Communication & Awareness (website, press relations, general position papers on CO₂ Utilisation, etc.);
- 4. Standards & Methodologies (Life Cycle Assessments, Technico-Economic Assessments, CO₂ emissions accounting, etc.).

During the second year of the Association, additional Working Groups will be initiated to work on:

- 5. Increasing public funding for Research & Innovation (especially for higher TRLs), and
- 6. Setting-up large multi-partner scale demonstration projects across sectors.



4. Governance

What is the legal structure of the Association?

The Association will have a non-profit status without commercial activities. It will be based in Brussels and will be incorporated under Belgian law as AISBL ("Association Internationale Sans But Lucratif"), i.e. Non-Profit International Association.

What are the governance bodies of the Association?

- A General Assembly composed of all full members
- A Board of Directors composed of a limited number of members elected by the General Assembly.
- Working Groups and Task Forces, i.e. permanent or temporary groups (respectively) with specific objectives and mandates, open to all members (under certain conditions), and reporting to the Board.
- A Secretariat, composed of a limited permanent staff, in charge of day-to-day operations and reporting to the Board.

What will be the composition of the Board of Directors?

The Board will be composed of maximum 11 members, with a balanced representation across the various segments of the CO_2 value chain, across industrial sectors and across CO_2 conversion routes. The Board will include minimum 2 representatives of SMEs and 1 representative of research organisations.

What will be the composition of the Secretariat (permanent staff)?

The Secretariat will be composed of a Secretary General and a limited number of permanent staff members with expertise in advocacy, public affairs, research & innovation and networking. The size of the team will initially be quite limited (2-3 persons in total) and will grow progressively as needed, if resources allow. All non-core functions (e.g. finance & accounting, communication, IT) will outsourced.

What are the main costs and revenues of the Association?

The main costs of the Association will be related to the permanent staff working for the Secretariat. Revenues will initially come primarily from membership fees. After 1 or 2 years, part of the Secretariat staff could possibly be funded under European projects.

What is the expected yearly budget of the Association?

The budget is not known precisely yet since it will depend on the number and types of members who will decide to join the Association. First estimates range between €450 000 and € 600 000 for the first year of operation (2018). The recruitment of permanent staff for the Secretariat (number of persons hired and dates of hiring) will be adapted in function of the funds collected via the membership fees.



5. Membership

Why should I become a member?

<u>Collectively</u>, all members will benefit from the development of framework conditions which can truly stimulate the development of CO₂ Utilisation in Europe: favourable regulations and market policy instruments, increased public funding for Research & Innovation, strong awareness and acceptance among policy makers, etc.

<u>Individually</u>, organisations who choose to join will also benefit from:

- Ability to shape the strategic orientations of CO₂ Value Europe;
- First-hand access to information (e.g. on projects in preparation and available funding sources);
- Opportunities to share knowledge with other players across the CO₂ Utilisation value chain
- Possibilities to find partners for projects;
- Enhanced credibility as member of an innovative community.

Who are the other members?

Current membership is composed of the 29 leading partners listed in section 2 above, who actively worked to prepare the creation of the Association since January 2017. Between mid-August and mid-September 2017, close to 20 additional organisations have already decided to join us, among whom a majority of large industrial companies, innovative technology developers, research organisations and universities. Together, these members cover the complete value chain for CO₂ Utilisation, over a broad range of technologies and application markets.

Who can become a member?

Any organisation with a genuine interest in CO₂ Utilisation and committed to sign the Membership Charter (See question "What is our commitment towards climate change mitigation"). Private companies must have industrial and/or research activities in Europe.

Who can be full or associate member?

- Industrial companies of large and medium size can only join as full members.
- Small companies (less than 50 employees) and RTOs (Research & Technology Organizations) can decide whether they want to be full or associate members, and pay the corresponding membership fees.
- University departments, national/regional clusters, port and territorial development agencies, private investors, European sectorial/thematic/network associations or NGOs can be associate members.
- Sectorial/trade associations at national level, policy makers and governmental agencies cannot become members.

What is the role of academia and research institutions?

CO₂ Value Europe is an industry-driven association, with a focus on the development and market deployment of sustainable industrial solutions (See question "What is our mission"). This requires close cooperation with universities and research institutions.

- Discussions will focus mostly on higher Technology Readiness Levels (TRLs 5 to 9) which are most relevant for industrial pilot and demonstration projects.
- Discussions relative to lower TRLs will be directed towards other associations (e.g. CO₂Chem Network <u>www.CO2chem.com</u>) with whom CO₂ Value Europe will maintain close relations.



What are the membership fees?

	Yearly fee in start-up period (2018-2019)	Yearly fee after first 2 years (2020 and after)
Large companies	€ 15,000	€ 10,000
Other full members	€ 5,000	€ 3,500
Associate members	€ 2,000	€ 1,500

Founding members (i.e. who decide to join before 27 October 2017 and attend the Founding Assembly on 30 November 2017) will have to pay their first membership fees for the year 2018 (no fees will be charged for 2017). The invitation to pay that will be sent by the Secretariat of the Association will be dated either on December 2017 or on January 2018, according to what is more convenient for the member. The fees will have to be paid in any case by 15 March 2018. Fees for members joining during the year 2018 will be calculated on a pro-rata temporis basis.

What are the rights and obligations of members?

There are two types of members: full and associate.

- <u>Full members</u> define the strategic orientations and key positions of the Association. They
 have a voting right at the General Asembly and can be elected at the Board of Directors.
 They can participate, chair and vote in all Working Groups and Task Forces. They receive
 the full benefits available to members (full information, advanced notification of upcoming
 calls for projects, preferred conditions for events organised by the Association, etc.). They
 have the obligation to participate to at least 1 Working Group (except for small companies
 of less than 50 employees).
- Associate members can contribute to the Association and receive privileged information (vs. non-members). They can attend the General Assembly but cannot vote, and they cannot be elected at the Board of Directors. They can participate in Working Groups and Task Forces (subject to approval by the Chairperson for the Working Groups involved in advocacy and external communication) but cannot chair nor vote. They have access to key documents (e.g. roadmaps, position papers) developed by the Association and can propose comments before public release. They receive the newsletter of the Association and have access to specific sections of the intranet. At events organised by the Association (e.g. conferences, projects matchmaking), they benefit from preferred conditions vs. non-members.
- ⇒ All members have to sign the Membership Charter.

How will members be concretely involved in the activities of the Association?

- Via the General Assembly
- Via participation in Working Groups or Task Forces, or specific events organized by the Association (conferences, project matchmaking)
- Via the Board of Directors (for full members only, if elected by their peers)
- Via Temporary Task Forces (working on the set-up of the Association, until end of 2017).



Can different companies from the same sector join CO₂ Value Europe?

Yes, competing companies are very much welcome to join the association, to increase its representativeness and add critical mass. All activities of the Association are pre-competitive by nature. When joining the Association, all members commit to respecting competition law and anti-trust rules.

If I want to join, how should I proceed?

If you are interested, please contact Damien Dallemagne (+32 488 366 231, (damien.dallemagne@greenwin.be) who will provide you with all necessary information. If you decide to register as a member before 27 October 2017, your organisation will be listed as "Founding Member" in the Statutes of the Association and you will be invited to participate to the Founding General Assembly on 30 November 2017. After 27 October, your organisation can still become a member but it will not appear in the Statutes.

Whom can I contact for more information?

Please contact Damien Dallemagne <u>damien.dallemagne@greenwin.be</u> (+32 488 366 231), who is acting as coordinator of this initiative.

