



## CAN EUROPE'S POSITION ON CARBON CAPTURE AND STORAGE and/or USE (CCSU)

*Climate Action Network (CAN) Europe is Europe's leading NGO coalition fighting dangerous climate change. With over 170 member organisations active in 38 European countries, representing over 1.500 NGOs and more than 47million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.*

---

If countries want to avoid the most dangerous impacts of climate change, temperature increase must be limited to 1.5°C above pre-industrial levels : a central objective of the Paris Agreement, adopted by 196 countries. To achieve this objective, all countries must substantially and urgently increase their current inadequate levels of individual and collective action.

An assessment of 1.5°C compatible emission pathways indicates that, in order to stay below 1.5°C warming, global CO<sub>2</sub> emissions need to be at net-zero before 2050, and global greenhouse gas emissions would need to reach net-zero soon after. To achieve the net-zero target and net negative emissions soon after, the EU will need a steep reduction in greenhouse gas emissions from all sectors. This will require a very rapid transition to a 100% renewable energy system, a fast phase-out of the use of all fossil fuels, and decisive action to reduce emissions from land use, land use change and forestry, while securing the ability of our forests, wetlands, grasslands and farmlands to remove carbon from the atmosphere, through much greater efforts to conserve these ecosystems, and restore them and enhance their natural carbon removal capacity through ecosystem and forest landscape restoration.

Furthermore there is a debate about the possible contribution of carbon capture technologies, both as a means to reduce emissions (at their source) and as a tool to remove carbon from the atmosphere.

The European Commission's Strategic Long-Term Climate Vision, launched in November 2018, strongly relies on both Carbon Capture and Storage (CCS) and Direct Air Capture (DAC) for all of its net-zero by 2050 scenarios (between 5 and 11% of the effort). The most ambitious pathways that depend the least on carbon capture and storage technology also address the emission reduction potential of lifestyle choices. In light of the climate emergency, the discussion about carbon capture and storage must not deflect attention from the need for policy makers to address unsustainable production and consumption patterns and structures.

## **Climate Action Network Europe agrees on the following:**

### Science and principles

CAN Europe supports the objective of the Paris Agreement to limit global average temperature rise to 1.5°C, and believes all efforts need to be made to make this happen as heating of 1.5°C will already have devastating impacts on people and ecosystems, in particular on the most vulnerable communities.

1. Achieving the 1.5°C objective will need transformational change to achieve early, deep and sustained reductions in fossil fuel carbon combustion. This transition will require an increased deployment of renewable energy, strong near-term reductions in energy consumption, restoration of ecosystems and natural carbon sinks, electrifying heat and surface transport as well as substantial changes to the production and consumption patterns of our societies, at a speed that is many times faster than what governments are willing to do today.
2. In light of the European Union's capacity to act, its historic responsibility and the equity principles underpinning the Paris Agreement, CAN Europe calls upon the EU to reduce its greenhouse gas emissions by at least 65% by 2030, compared with 1990 levels, and achieve net-zero emissions by 2040 and net negative emissions soon after<sup>1</sup>.
3. CAN Europe believes and reiterates that first and foremost radical action needs to be taken to phase out almost all greenhouse gas emissions in Europe as quickly as possible in a socially just manner. Removing carbon from the atmosphere, through natural sinks or technological options, should be seen as complementary to emission reduction efforts, and not as an alternative.
4. There is an urgent need to increase the capacity of natural carbon sinks through ecosystem restoration and reforestation, while respecting stringent social and ecological safeguards. In order to reach climate-neutrality, the EU should establish dedicated targets for removals<sup>2</sup>. Natural carbon sinks should continue to be prioritised in any consideration of the need for net negative emissions. Irrespective of the possible use of CCS technology, we must ensure that efforts to reduce emissions at source, decrease the consumption of energy and materials, and protect, restore and increase natural carbon stocks and sinks are maximised with ecologically and socially sound nature-based solutions.

### Energy Systems

5. CCS must not be used in the EU power sector. The use of fossil fuels in the power sector must be phased-out extremely rapidly and deploying CCS will delay these necessary phase outs: Coal power must be phased-out in the EU by 2030, and fossil gas power by 2035. CAN Europe does not accept governments to support the fossil fuel power industry to make CCS economically viable in the EU's electricity sector.

---

<sup>1</sup> See CAN Europe position on long term targets. <http://www.caneurope.org/publications/can-europe-positions/1656-can-europe-position-on-long-term-targets>

<sup>2</sup> See CAN Europe position on the LULUCF Regulation. <http://www.caneurope.org/docman/land-based-emissions/3023-can-europe-lulucf-position-dec-2016/file>

6. Energy savings and sustainable renewable energy technologies are the only options to replace climate polluting technologies in the energy sector. Investments in the energy system should transform it into a highly flexible system, able to cope with the weather-dependent variability of certain renewable energy, while grids, storage and demand response technologies should facilitate further deployment of energy savings and renewable energy. In cases where biomass is deployed, it should not weaken the ability of the land sector to store and sequester carbon.
7. Any government subsidy, loan or grant to technologies that use fossil fuels should be phased out as soon as possible and at the latest by 2020 in Europe.

## Industrial emissions

8. A few large industrial sectors (such as primary steel, cement clinker and chemicals) face challenges in achieving the rapid decarbonisation that will be needed in the next decades. These process emissions need to be addressed. CAN Europe calls upon EU institutions to better align the Union's industrial policy framework with its climate objectives and provide a robust and reliable framework that ensures that industry sectors fully deliver their share of the EU's 2030 targeted emission reductions and become climate-neutral by 2050 at the latest or earlier if possible. Furthermore, we call on governments and industry to rapidly accelerate ongoing research and industrial pilot solutions to develop and deploy processes and materials that do not need fossil fuels or do not produce carbon and other GHG emissions.
9. As a first step, government support and regulation needs to be concentrated on research, development and deployment of these technologies. In addition, government policy needs to ensure that carbon intensive industries develop decarbonisation roadmaps with a target of reaching climate-neutrality by 2050 at the latest or earlier if possible, revisit business models and increase own investments into critical decarbonisation processes and technologies. Even after all clean energy, energy savings, material efficiency and product design measures have been taken, for some processes, in particular for the production of cement, certain grades of steel and certain chemical products, there may be a need for CCS regarding these residual process emissions. Political frameworks may need to be developed for CCS/CCU market integration in these remaining industrial processes. Such frameworks would have to be developed alongside a clear roadmap for replacing the carbon intensive products and processes with renewable alternatives.

## Usage

10. CCU does not permanently store CO<sub>2</sub> emissions if used as synthetic fuels. These emissions are released back into the atmosphere either immediately if they are passed on to another polluting activity, such as synthetic fuels, or after a time delay. When assessing potential CCU applications, lifecycle analyses of CCU need to follow standard ISO 14044 or the greenhouse gas protocol in order to counter greenwashing attempts of new methods for the reutilisation of carbon. New use cases and technologies have to be developed now in order to ensure that CO<sub>2</sub> used will not be released into the atmosphere (right) after its second use cycle. CCU will not be a solution to achieve climate-neutrality if the electricity required for its process is generated with fossil fuels. The possible scale of CCU and its role to achieve a climate-neutral industry needs to remain under critical scrutiny.

## Bioenergy and carbon capture and storage (BECCS)

11. BECCS should not at the present moment be part of a pathway towards net-zero or net-negative emissions as the current EU's long-term target can and should be reached by other means. Any BECCS solution needs to account fully for process emissions, impact on carbon sinks and foregone sequestration in the land sector. Any policy proposed that domestically or internationally aggravates deforestation, biodiversity loss and infringes land rights is unacceptable.
12. Unless the use of bioenergy and carbon capture and storage is subject to very strict criteria that guarantee a sustainable sourcing and use, that it does not drive additional deforestation and increase of plantations thereby undermining the Sustainable Development Goals and that it does not offset emission reductions, BECCS is not a viable solution to achieve climate-neutrality. In the near-term climate, the policy priority must be to mitigate all GHG emissions to the atmosphere.

## Enhanced Oil and Gas Recovery (EOR/EGR)

13. EOR/EGR is a technique through which captured CO<sub>2</sub> is used to improve and enhance the exploitation of oil and gas fields. Most oil and gas products combined are utilised in distributed sources like cars, heating, etc. where any potential CO<sub>2</sub> capture is not possible and therefore EOR/EGR is a perverse incentive. These activities contradict the need to keep most of our fossil fuel reserves in the ground, and therefore CAN Europe strongly objects to such activities and their public financing.

## Storage

14. Industrial CCS on process emissions is only an option as long as the emissions are stored permanently in a safe location. The selection of storage sites needs to be subject to robust, strict and transparent social and environmental criteria and the storage facility needs to undergo continuous and strict independent science-based third-party monitoring.
15. Governments and storage facility operators are jointly responsible to guarantee the permanence and safety of storage facilities and need to ensure legal certainty over liabilities in a way that warrants the facility operator to apply the highest possible safety standards. As long as there is no acceptable legal liability scheme in place to address eventual leakage of CO<sub>2</sub>, CAN will object to those locations.