



CAN EUROPE'S POSITION ON INDUSTRIAL TRANSFORMATION

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 47 million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.

Introduction

Industry is both a major contributor to the climate emergency as well as increasingly hit by climate impacts and uncertainties. Industry currently represents 14% of the EU's total greenhouse gas emissions. Recent industrial emission levels have been stagnating, not declining, proving the failure of the current regulatory framework. To align with the Paris Agreement 1.5°C goal, Europe must act quickly now to aim to reach climate neutrality by 2040 and increase its 2030 climate target to 65% emission reductions compared to 1990 levels (see our [Climate Urgency Plan](#) and [long-term targets](#) positions).

CAN Europe welcomes the positioning given to industrial transformation and to the circular economy within the European Green Deal. Industry plays a central role in contributing to Europe's global environmental and climate footprints and if targets and incentives are set correctly industry is also essential to provide technological solutions at scale to curtail the climate and biodiversity crises. It is long recognised that Europe's production and consumption patterns are unsustainable, and that living well within the limits of our planet requires a 'rapid and fundamental shift in character and ambition of Europe's responses' (EEA 2019, SOER 2020). This means finding ways to transform key societal systems driving environment and climate pressures and impacts by rethinking technologies and production processes as well as consumption patterns and ways of living.

The EU's Industrial Strategy and the new Circular Economy Action Plan offer elements of steps towards the agreed EU climate-neutrality target, and importantly seek synergies between actions aiming to reduce greenhouse gas emissions and those addressing similarly important issues such as resource use and related negative impacts. However, there are a number of areas and issues we think lack attention or detail or which clearly need improving. The areas below represent our priority issues needing further attention.

Headline messages

- *Principles of transformation:*
 - Industrial transformation priorities should be to reduce resource and energy use, greenhouse gas emissions and air pollution as well as solid waste. Pressures and impacts on nature and ecosystems must be severely curtailed. Circularity plays a role in this transformation.
 - A systemic approach is needed to strengthen the links between industry actions to reduce resource and energy use and related negative environmental and human health impacts.
- *Ambition and governance:*
 - The Industrial Strategy lacks clear minimum requirements and criteria for industry roadmaps which are needed given the level of transformation required. No backstop measures are designed or mentioned, to avoid industry delaying or watering down ambition. This is of particular importance for the energy-intensive industries.
 - The increasing use of non-transparent Alliance structures to develop and implement EU policy objectives and activities is a rolling back of established participatory processes
 - The Industrial Strategy should make full use of existing legislative tools that could already set pathways to climate neutrality.
 - Systematic Alliance monitoring and evaluation is crucial to ensure we are on good trajectories. An independent observatory would be better placed than the Industrial Forum for monitoring and evaluation, and with a wider economy overview given the likely medium- to long-term social and economic impacts of the COVID-19 pandemic.
- Financing and investing in the transformation
 - The absence of conditions on industry funding is unacceptable, especially as sometimes significant transformations will necessarily demand considerable sums of financing.
 - The Industrial Strategy does not mention a clear carbon price trajectory or the EU ETS, leaving out a key element of industrial climate-neutrality. The EU ETS and the announced Carbon Border Adjustment Mechanism must align to provide identical market signals to industries inside and outside the EU.
- *Energy use and mitigation options*
 - Industry can already easily make changes to its energy sources, producing or purchasing renewable electricity and making other fuel switches.
 - The 'energy efficiency first' principle can be applied to existing processes while industry explores transformations giving reductions in resource use and its impacts.
 - The Strategy fails to provide for a comprehensive approach to achieving a switch to a fully renewable and climate-neutral energy system. Gaps remain on potential low-carbon technologies and trajectories for their increased presence on the market. Various 'low(er) carbon' energy sources are mentioned in the Industrial Strategy, with no framing on what might be considered within vague terms such as 'clean' hydrogen.
- *Transforming infrastructure*
 - Existing energy infrastructure needs to be adapted to be able to meet Paris Agreement targets and to incorporate sustainable and low-carbon technologies before creating new infrastructure.
 - EU energy infrastructure planning must enable industrial transformation based on wide uptake of clean technologies.

- A climate-neutral, resource efficient and circular economy also needs adapted or new infrastructure.
- *Just Transition*
 - Climate-neutral and resource efficient industrial transformation must also be socially just.
 - The entire EU budget must become the EU's Just Transition Fund.
 - The Just Transition Mechanism must be used to drive the speedier transition to climate-neutrality and local/regional resilience.

Principles of transformation

Industrial transformation priorities should be to reduce resource and energy use, greenhouse gas emissions and air pollution as well as solid waste. Pressures and impacts on nature and ecosystems must be severely curtailed. Industrial transformation will need to include a rethink on what we produce and how, while shifting business models accordingly. In its European Green Deal Communication, the Commission states: “Around half of total greenhouse gas emissions and more than 90% of biodiversity loss and water stress come from resource extraction and processing of materials, fuels and food.”¹ The Commission’s aim is to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use. The UNEP Emissions Gap Report 2019² provides further scientific evidence of the need for the EU to reduce its greenhouse gas emissions to net zero by 2040.

A systemic approach is needed to strengthen the links between industry actions to reduce resource and energy use and related negative environmental and human health impacts. The new Circular Economy Action Plan’s sustainable product policy legislative initiative needs to set sustainability principles including reducing carbon and environmental footprints. The Action Plan also includes actions on ‘Circularity as a prerequisite for climate neutrality’, mainly tools for analysis and modelling, and integration of circularity into future revisions of National Energy and Climate Plans. Industrial transformation efforts need to ensure an integrated and systemic approach to reduced carbon and environmental footprints.

Ambition and Governance

EU industrial transformation needs a short- to medium-term framework aligned with the EU target of achieving climate-neutrality: the absence of clear minimum requirements and criteria for industry roadmaps is worrying given the level of transformation required. No backstop measures are designed or mentioned, to avoid industry delaying or watering down ambition. The new Industrial Strategy contains no details of pathways to the creation of such a framework nor of individual sector pathways to climate-neutrality. Industry sectors are to be ‘invited and incentivised to define their own roadmaps for climate neutrality’, enabled by high quality research and skills and supported by the EU. In order to remain within the 1.5°C range, disruptive transformation is required long before 2050 – milestones will need to be set from 2030 already if the EU intends to seek to ‘bend’ trends towards a more sustainable trajectory (*EEA 2019*). Beyond

¹ European Commission, 2019; European Green Deal communication

² United Nations Environment Programme, 2019; Emissions Gap Report 2019; UNEP, Nairobi

climate-neutrality, scientific evidence identifies that atmospheric concentrations need to be reduced as well. In preparing pathways to 2050, the EU and Member States need to continue to develop thinking beyond 2050 and aim for Europe to remove more CO₂ than it is emitting – pathways developed now and in the coming years need to already have this on their horizons.

The increasing use of non-transparent and exclusive Alliance structures to develop and implement EU policy objectives and activities is a rolling back of established participatory processes in which civil society automatically takes an active part. Industry-led Alliance structures are the main tools designed to deliver the Industrial Strategy: civil society is not mentioned once as a partner in these structures. Civil society contribution is particularly important to ensure the framing of the objectives, priorities, measures and timelines are scientifically based and the setting of ambition of transformation needed to achieve the ‘shift in character and ambition of Europe’s responses’. Civil society must be part of discussions from the start, and therefore needs to be written explicitly into Strategies, Action Plans, etc. and included in preparatory discussions when the rules of the game are being set. Recent experience from the Circular Plastics Alliance shows that civil society was invited into the Alliance only after its objectives, targets and proposed actions had been agreed. Civil society has rightfully argued that the Alliance’s focus on recycling over plastic use reduction and reuse is not aligned with the overarching objectives of the EU Plastics Strategy. This narrowed cherry-picking of issues cannot be repeated with climate action central to industrial transformation and averting irreversible climate change.

The Industrial Strategy should make full use of existing legislative tools that could already set pathways to climate neutrality. The Strategy does not harness the potential to integrate climate-neutrality into the Industrial Emissions Directive, nor does it frame linkages to key carbon pricing tools such as the Emissions Trading System (see CAN Europe positions on [ETS](#) and [ESR](#)).

The Industrial Forum’s strategic role must include to ensure that a systemic and holistic approach is taken to transformation and it must have a clear element of assessment, monitoring and evaluation, to regularly evaluate effectiveness of targets and actions agreed by individual alliances. CAN Europe and other civil society organisations have called for an independent observatory composed of relevant stakeholders, including civil society organisations, to be established. An independent observatory could provide much-needed neutral monitoring and evaluation of the Alliances, alongside more economy-wide support of recovery efforts in the context of the COVID-19 pandemic. An observatory could continually monitor progress towards multiple EU objectives including the climate neutrality target and suggest corrective measures in an evidence-based, inclusive and transparent manner if real world emissions deviate from the trajectory. Leaving this to the Industrial Forum raises questions about industry dominance in the Forum and therefore its ability to provide independent evaluation.

The importance of the transformation of energy-intensive industries requires clear and timely roadmaps with targets, milestones and monitoring and evaluation. Energy-intensive industries are recognised for their key role and are told they need to reduce their carbon footprints and accelerate the transition by providing affordable, clean technology solutions and by developing new business models. This is a very good signal from the European Commission, but is lacking clear sectoral targets or processes for their development. Future sectoral strategies for steel, chemicals and cement are mentioned but without details, although the strategies for chemicals and cement feature in the Circular Economy Action Plan, incorporating wider environmental impacts.

Financing and investing in the transformation

The absence of future funding conditionality is unacceptable, especially as sometimes significant transformations required will necessarily demand considerable sums of financing. The Industrial Strategy recognises the importance of mobilising funds for much of the transformation needed. It seeks synergies between different pots and sources of public funding, and from private investment. We welcome the recognition that private investment should continue to play an important role in financing industrial transformation, particularly as public funding is scarce and competing with other objectives delivering societal benefits. Harmonies should be encouraged and required where possible to ensure that EU and national funds as well as private investment provide a strong market signal by supporting clean technologies and resilient and flexible infrastructures. Infrastructure should not deepen industries' dependency on fossil fuels. Unsustainable technologies including nuclear should not be funded (see 'Transforming infrastructures' section below).

Another notable, unfortunate absence is a clear carbon price trajectory. This remains the most important financial signal for industry and can provide the most immediate market certainty for any company considering changes to its products, services or production processes. It provides the incentive for industry to make long-term decisions aligned with the Paris goals.

The Emissions Trading System's absence from the Industrial Strategy is an unacceptable side-stepping of a key element of industrial climate-neutrality. The Strategy could have included framing elements of ETS reform, to provide a market signal in a high-level EU document. [ETS ambition](#) must be substantially increased in order to be in line with the objectives of the Paris Agreement. Member States have individually imposed carbon taxes at national level, however in order to be most efficient a Europe-wide tax should be implemented.³ The practice of insufficiently targeted and over-generous free allowances to carbon-intensive industry must stop. ETS revenue should also be earmarked for climate action measures that further drive a just transition towards a climate-neutral society

The EU ETS and the announced Carbon Border Adjustment (CBA) Mechanism must align to provide identical market signals to industries inside and outside the EU. A CBA is proposed to be introduced should differences in ambition around the world persist. Such a mechanism is one among many various measures that can promote decarbonisation of products, truly exploiting the EU's capacity to incentivise other countries to introduce industrial decarbonisation policies. However, if the Commission continues in this sense, all ETS free allowances will have to be eliminated as they are incompatible with a CBA.

Energy use and mitigation options

Industry can already easily make changes to its energy sources, producing or purchasing renewable electricity and making other fuel switches. A rapid bending of trends is needed to get the EU on a more certain trajectory of achieving climate-neutrality by 2050 at the latest. CAN Europe therefore calls for a 100% renewable European energy system by 2040 at the latest (see our [Climate Urgency Plan](#) position) and for a rapid electrification of industrial processes. Parts of the European energy sector have been moving to phase out coal use and industries need similarly to move on

³ As at May 2020, CAN Europe is finalising a position paper on carbon pricing. See <http://www.caneurope.org/publications/can-europe-positions> for its eventual publication.

their decarbonisation in line with net zero-emissions targets. For both energy and industry, this phase-out needs to speed up considerably to align with Paris targets.

The energy efficiency first principle can be applied to existing processes while industry explores wider transformations giving greater reductions in resource use and impacts. The Industrial Strategy recognises that reducing emissions will depend on an ‘energy efficiency first’ principle. At the global scale, improving energy efficiency in heavy industries could reduce fuel consumption for energy by 15 to 20%⁴, good steps forward but not enough to achieve Paris Agreement targets.

The Strategy fails to provide for a comprehensive approach to achieving a switch to a fully renewable and climate-neutral energy system. The recognition of the need for a more strategic approach to renewable energy industries is stated with no clear potential pathway(s) suggested, and only offshore energy is explicitly mentioned. A further strategy, on smart sector integration, is announced with little explanation.

Gaps remain on potential low-carbon technologies and possible trajectories for their increased presence on the market. The Strategy is a missed opportunity for framing future developments on the shift to fossil-free technologies and processes, and most importantly it side-steps central issues that require clear framing from the European Commission before industry influence can continue to undermine higher ambition levels.

Various ‘low(er) carbon’ energy sources are mentioned in the Industrial Strategy, with no framing on key issues such as what might be considered acceptable within vague terms such as ‘clean’ hydrogen (see our [gas](#) position). The vague nature of the document leaves too many important gaps in the inclusion or exclusion of certain energy sources, such as fossil gas converted into hydrogen with CCS (so called ‘blue’ hydrogen), and therefore continues to leave the door open for watering down of ambition towards the aim of the European Green Deal to achieve climate neutrality and promote economic growth decoupled from resource use. There is even no mention of controversial technologies such as CCS/CCUS⁵ that will inevitably feature in decarbonisation discussions. Greenhouse gas abatement technologies such as CCS/CCU must remain a last-option technology, with use restricted and targeted to the industry sector.

Transforming infrastructures

Existing energy infrastructure needs to be adapted to be able to meet Paris Agreement targets and so to be able to incorporate sustainable and low-carbon technologies before creating new infrastructure. Effecting societal transformations includes reflection on what infrastructures are needed to make the transformations easier and smoother. In a 21st century of increased uncertainty and need for resiliency, and with limited and even reduced public funds, infrastructure decisions need to allow for flexibility in future transition pathways while avoiding technological lock-in. Climate-neutrality requires sharp transitions away from fossil-based energy sources including fossil gas in addition to coal, to avoid a long drag on emissions reductions. The EU’s energy infrastructure planning needs to align to the Paris Agreement to enable a swift transition to a 100% renewable-

⁴<https://carbonmarketwatch.org/wp/wp-content/uploads/2019/04/Cracking-Europe%E2%80%99s-hardest-climate-nut-1.pdf>

⁵ As at May 2020, CAN Europe is preparing a position paper on CCS. See <http://www.caneurope.org/publications/can-europe-positions> for its eventual publication.

based energy system, a speedier phase-out of fossil fuels and targeted development of renewable hydrogen and other non-fossil gases (see our [gas](#)⁶ position).

EU energy infrastructure planning must enable industrial transformation based on wide uptake of clean technologies. The TEN-E Regulation and the Ten Year Network Development Plans need to help drive rapid reduction of greenhouse gas emissions. A cross-sectoral optimisation of flexibilities in demand, supply and infrastructure can avoid stranded infrastructure assets in industry.

A climate-neutral, resource efficient and circular economy also needs adapted or new infrastructure. Industrial transformation must seek synergies between actions aiming to reduce greenhouse gas emissions, reduced resource use and its environmental impacts, and align these with infrastructure needs. Circular production and consumption of resources and resource-intensive materials have emerged as one of the most promising and quick ways to decarbonise industrial value chains. A recent report⁷ found that a substantial increase in recycling of steel, plastics and cement could avoid the production of 150Mt of virgin materials. Increasing material reuse and substitution can reduce greenhouse gas emissions from steel, plastics and cement industries by 33%. Demand-side measures can also abate more than half of all emissions from the steel, plastic, aluminium and cement industries by 2050.⁸

Just Transition

The climate-neutral and resource efficient industrial transformation must also be a socially just transition (see our position on the [Just Transition Mechanism](#)). We need to help all Europeans as we move towards a resource-efficient and decarbonised European industry through targeted measures and investment. As part of wider efforts to make societies and economies more equitable, the costs of transition should not be borne unfairly by some communities and the benefits should be shared equally. New jobs in certain industries will be created – such as in digitalisation, decarbonisation, circularity and low-carbon solutions – and these will require new skill sets. In some areas, net job losses must be anticipated and transition funds can target these areas.

The entire EU budget must become the EU's Just Transition Fund. It is best placed to catalyse the just transition to a circular, climate neutral economy within planetary limits.

The Just Transition Mechanism must be used to drive the speedier transition to climate-neutrality and local/regional resilience. It should not fund fossil fuel investments, and should empower regions and local authorities to design bespoke Just Transition plans and projects. The Just Transition Mechanism should also be complemented by broader measures which ensure a holistic approach is taken to the transition in the form of comprehensive, locally-developed transition plans. Support for the transition should be contingent on the existence of such plans or should support their development.

⁶ In our gas position paper, the term fossil gas is used to denote gases from fossil fuel sources. There is a lot of confusion over terms such as “renewable”, “green” or “decarbonised” gases, which are in many cases misleading. That is why we use the term non-fossil gas to indicate clearly that in our view, only those types of gases which deliver genuine climate benefits and which do not originate from a fossil fuel can under certain conditions be considered as a future energy source. Non-fossil gases not only comply with a net zero emission society but also come from sustainable and renewable sources.

⁷ Material Economics, 2019

⁸ Material Economics, 2019