Cleaning up industry: why the EU's strategy isn't enough yet

WWF and Carbon Market Watch’s assessment of the European Commission Communication · July 2020

Summary

The new EU Industrial Strategy, released by the European Commission on 10 March 2020 as part of a larger industrial package, is the first sector-specific plan to be published since the European Green Deal was announced. It is an opportunity to put the EU economy on track towards climate neutrality, and put climate action at the heart of the EU’s economic recovery from the health crisis, by making a clear case for the decarbonisation of industries. The climate neutrality objective was endorsed by the European Council on 20 December 2019 and included in the 2020 EU Climate Law legislative proposal.

However, the new Industrial Strategy fails to capture how and by when EU Industries will achieve a net zero greenhouse gas emissions or manufacture climate-neutral products. Rather than providing clear overarching objectives for industry, it mainly compiles old strategies on competitiveness and announces new initiatives (i.e. the creation of ‘Industrial Ecosystems & Alliances’). There is no mention of intermediate and long-term decarbonisation targets. Moreover, the Strategy fails to stress the competitive advantage that the low-carbon and digital transitions would bring.

The Industrial Strategy is now in the hands of the European Parliament and the Council for discussion. The European Parliament has now drafted an own-initiative report on Industrial Transformation, scheduled to be voted upon by the Industry, Research, Telecoms & Energy (ITRE) Committee in mid-July; and in plenary for September 2020. At the time of writing, the European Parliament also decided to draft an own-initiative report on the Circular Economy, with ENVI Committee leading on it.

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1 The EC released the last Industrial Strategy in September 2017: https://eur-lex.europa.eu/resource.html?uri=cellar:c8b9aac5-9861-11e7-b92d-01aa75ed71a1.0001.02/DOC_1&format=PDF
3 Commissioner Breton announced the creation of 14 to 16 different ecosystems during the press conference at the launch of the new EC Industrial Strategy (10 March 2020).
Details of this assessment:

Our economic recovery from Covid-19 pandemic depends also on the decarbonisation of energy-intensive industries. However, the EU’s recovery plan and the industrial strategy provide a little indication on how to set the industry on a sustainable decarbonisation pathway.

The structure for this assessment follows the top ten asks which WWF EPO and Carbon Market Watch consider essential to decarbonise the EU Energy Intensive Industries:

1. Climate neutrality objective & Governance
2. Support strong EU and national innovation policies
3. Create lead markets for zero-carbon technologies
4. Promote circularity and material efficiency for EIIs
5. Implement emission performance standards
6. Support and define sustainable and targeted uses of renewable hydrogen
7. Set out clear conditions and strict criteria for the deployment of Carbon Capture and Storage (CCS)
8. Improve the carbon pricing framework & Implement a Border Carbon Adjustment (BCA) only as an alternative to free allocations
9. Ensure a well-designed Just Transition Mechanism
10. Further recommendations

1. Climate neutrality objective & governance

What the EU Industrial Strategy says:

Climate neutrality objective

The Strategy includes a clear call for EIIs - such as steel, cement and basic chemicals - to become climate-neutral by stating that decarbonising them must be a “top priority”. It mentions that the “European Green Deal sets the objective of creating new markets for climate neutral and circular products, such as steel, cement and basic chemicals”. The Commission will “support clean steel breakthrough technologies leading to a zero-carbon steel making process” as well as the development of a “new chemicals strategy for sustainability”.
Moreover, the text states that “industrial sectors should be invited and incentivised to define their own roadmaps for climate neutrality”.

**Governance**

The Strategy introduces the new concept of “industrial ecosystems”. These ecosystems shall “encompass all players operating in a value chain: from the smallest start-ups to the largest companies, from academia to research, service providers to suppliers. And they each have their own features”.

The text also mentions that the Commission will support the creation of an Industry Forum, expected to be designed by September 2020. It will consist of “representatives from industry, including SMEs, big companies, social partners, researchers, as well as Member States and EU Institutions”. The Industry Forum should help the Commission to identify different industrial ecosystems.

Furthermore, the Strategy says that “where identified as necessary, the approach of industrial alliances” could be an appropriate tool as it has already “shown benefit in the area of batteries, plastics and microelectronics.” The European Commission is using the European Battery Alliance as an example to launch the new “European Clean Hydrogen Alliance bringing investors together with governmental, institutional and industrial partners”.

Finally, the Strategy outlines in its conclusion that the “Commission’s annual Industry Days will continue to be an important event to bring all players together”. Industry Days were initiated under the Juncker’s Commission and took place for the first time in February 2017 to enhance the dialogue on competitiveness issues between Industry representatives and EU officials.

**WWF EPO and CMW comments:**

**Climate neutrality objective**

The fact that the Strategy stresses the importance of reaching climate neutrality for heavy industry is welcome. However, it lacks clear sectoral targets and indicates no pathways towards climate neutrality for EIIs (especially for cement, steel and basic chemicals). Setting clear decarbonisation and technology deployment targets for 2030
and 2040 for EIIs is essential to make sure that crucial decisions to build zero-carbon steel, chemical and cement are taken early on. The Strategy mentions that the Commission will support the development of clean steel and a new strategy for chemicals, but falls short of giving a clear timeline for their deployment.

There is almost a complete lack of information on how the Strategy intends the cement sector to decarbonise, except for one sentence saying: "a more sustainable built environment will be essential for Europe’s transition towards climate-neutrality". Given that this sector is responsible for 5% of EU CO2 emissions\(^4\) and 8% of global CO2 emissions\(^5\), it will be crucial to come up with a clear strategy and to support technology development and lead markets for low-carbon construction products.

**Governance**

The European Commission wants to replicate the success of the Battery Alliance by extending the approach of Alliances to other industrial sectors such as: hydrogen, raw materials and low-carbon technologies. However, the Battery Alliance was mainly launched as a consortium of battery producers in Europe to drive up the EU production of batteries compared to Chinese and American manufacturers. Therefore, the concept of Alliance cannot be the only approach taken by the Commission to draw the pathways for these industries to decarbonise.

Moreover, the Strategy does not mention the participation of civil society representatives, such as in the Clean Hydrogen Alliance announced for Summer 2020. This is highly regrettable and could undermine the aim of such industry alliances, even making competitiveness appear a trade-off against decarbonisation. Finally, the Strategy mentions the creation of an Industry Forum, which would bring together industry representatives from both big companies and SMEs, social partners and researchers, Member States and EU Institutions. Once again, there is no explicit mention of civil society.

The creation of both new types of Alliance and Industry Fora must be achieved in a transparent way. Civil society representatives must from the start be part of shaping the objectives and timelines of such alliances and Industry Forum. It is of great importance, now more than ever, that civil society is considered as an equal partner in


contributing to the industrial decarbonisation pathways, with scientific expertise, to ensure the decarbonisation targets are achieved on time.\(^6\)

### 2. Support strong EU and national innovation policies

**What the EU Industrial Strategy says:**

The Strategy indicates that for the digital and ecological transitions in Europe, “new technologies, with investment and innovation to match” are needed. The industrial strategy needs to have “an industrial innovation strategy at heart”.

For this to happen the Commission foresees that stepping up investments in “research, innovation, deployment and up-to-date infrastructure will help develop new production processes and create jobs in the process”.

The Commission envisages the development of new zero-carbon technologies (such as carbon-free solutions) through the EU ETS Innovation Fund, which would help “deploy other large-scale innovative projects to support clean products in all energy intensive sectors”. Furthermore, a European Innovation Council (in 2021) shall “identify next generation technologies, accelerate their commercial application and help them support the rapid scale up of start-up.”

**WWF EPO and CMW comments:**

As the European Commission mentions “the next five years will be decisive to set the right enabling conditions for this transition”; thus the right investments must be put in place starting from now, especially in enabling low-carbon technologies to be developed in EII.

In order to do so the Commission must improve the EU public innovation policy, by re-orientating it towards getting zero-carbon technologies onto the market. However the Strategy once again lacks detail on how and by when the industrial innovation

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6 The creation of an Independent Observatory body was already requested by NGOs while designing the Master Plan for a Competitive Transformation of EII, but did not appeared in the final document, published in November 2019:  
strategy will be deployed. The European Commission wants the recovery package from the health crisis to focus on unlocking investment in clean technologies and value chains, notably through additional funding for Horizon Europe.

A strong investment framework must consist of a robust innovation fund, co-funding investment and other instruments to mitigate the higher operational costs for zero-carbon technologies (such as Carbon Contracts for Differences (CCfDs)). This will ensure the commercialisation of zero-carbon technologies on a large scale and within time frames necessary for effective climate mitigation. Both the Innovation Fund and CCfDs must be applied only to zero-carbon technologies and exclude support for fossil lock-in technologies in order to create the most impact for emissions reduction and ensure stringent governance.

3. Create lead markets for zero-carbon technologies

What the EU Industrial Strategy says:

The Commission mentions in its strategy that: “EU institutions, Member States, regions, industry and all other relevant players should work together to create lead markets in clean technologies and ensure our industry is a global frontrunner”.

In order for this to happen, the Commission acknowledges that “regulatory policies, public procurement, fair competition and the full involvement of SMEs will be essential to make this happen”.

To finance these new technologies, the Commission envisages different sources, from public funding to private investment: “these efforts should be supported by policies and financial instruments at EU and national level, as well as the private sector. Those who move first and move fastest will hold the greater competitive advantage”.

The European Commission is also looking at this aspect from an international trade perspective by launching a “White paper on an instrument on foreign subsidies” to be published by mid-2020 which also looks at foreign access to public procurement and EU funding. The Commission also wants to strengthen the global rules on industrial subsidies in the World Trade Organization, and ensure a swift adoption of the International Procurement Instrument.
The Commission will also ensure revised State Aid rules are in place in 2021 in a number of priority areas, including energy and environmental aid.

**WWF EPO and CMW comments:**

Creating a lead market for zero-carbon technologies is key to achieving a climate-neutral industry in Europe. However, the strategy lacks a clear timeline for the revision of public procurement rules. With the exception of the International Procurement Instrument which should be adopted in a rapid manner, delivery at EU level remains unclear.

More needs to be done to guarantee the development of lead-markets for zero-carbon technologies and ensure that EU Industry becomes a “frontrunner” in zero-carbon technologies. The Commission should support the introduction of norms, quotas and standards for zero-carbon materials (especially for chemicals, steel and cement sectors) in order to create incentives for both EU international industry to invest in zero-carbon technologies.

However, in the Circular Economy Action Plan, the Commission announces that it will “propose minimum mandatory green public procurement (GPP) criteria and targets in sectoral legislation and phase in compulsory reporting to monitor the uptake of GPP without creating unjustified administrative burden for public buyers”. This is scheduled for 2021.

**4. Promote circularity and material efficiency for EIIs**

**What the EU Industrial Strategy says:**

The Strategy says that one of the main drivers for industrial decarbonisation will be to “entail a shift from linear production to a circular economy”.

The strategy mentions that “applying circular economy principles in all sectors and industries has the potential to create 700,000 new jobs across the EU by 2030, many of which in SMEs”. To build this more circular economy, the Strategy proposes to focus future work on batteries, textiles and electronics.
The Industrial Strategy also outlines that the new Circular Economy Action Plan, adopted in parallel with the EU Industrial Strategy “puts forward a series of measures to allow the EU’s industry to seize these opportunities”, “including a new sustainable product policy framework.” The new Circular Economy Action Plan should also empower “consumers to play an active role in the circular economy, through better information on products and improved consumer rights.”

**WWF EPO and CMW comments:**

The Strategy has very high ambition on circularity, stressing the need to “revolutionise the way we design, make, use and get rid of things by incentivising our industry”. Nevertheless, the Strategy clearly lacks **concrete measures** as to how to achieve circularity in the EIIs. The Commission points to a number of elements for further work, but then merely announces new strategies (i.e on textiles) or initiatives (i.e on electronics) to be developed in 2020 or in 2021 without elaborating on their content.

The only legislative initiative that the Strategy is suggesting is a new regulatory framework for sustainable batteries - an announcement which was already scheduled for this year in the European Commission Work Programme. The Commission Work Programme says more on this initiative than the Industrial Strategy, stressing that this new framework will aim to better factor in circularity and improve sustainability for batteries, keep pace with technological development and encompass end-of-life requirements.

We welcome the Commission’s initiative to set a “sustainable product policy” under the framework of the Circular Economy Action Plan. However this initiative would also greatly benefit from more details on the key principles which need to be tackled in order to reduce carbon and environmental footprints. Additionally, the Circular Economy Action Plan refers to the importance of strengthening the role of circularity in future revisions of the National Energy and Climate Plans (NECPs) but remains silent on how it intends to do it. Circularity is not specifically listed as an element that EU Member States must include in their NECPs under the Governance regulation, and the European Commission does not foresee a revision of the governance regulation at
this time. Finally, the Circular Economy Action Plan briefly addresses circularity in EIIs, without putting forward concrete measures and/or policies.

5. Implement emission performance standards

What the EU Industrial Strategy says:

There is no mention of a possible implementation of emission performance standards.

WWF EPO and CMW comments:

Implementing performance-based standards for greenhouse gas pollution not only leads to incremental improvements for wider air pollution but also benefits resource consumption as well as climate protection.

CO₂ performance standards will ensure greater uptake of zero-carbon and energy efficient solutions on the European single market.

One of the most straightforward ways of introducing CO₂ performance standards for energy-intensive industries is through the upcoming revision of the Industrial Emissions Directive (IED). This directive regulates pollution from around 50,000 large industrial installations in Europe, and requires industries to meet performance-based pollution limits, which are periodically reviewed. However, it does not cover greenhouse gases. The IED should include limits on carbon emissions within the criteria that an industrial plant must fulfil when applying for an environmental permit.

The introduction of GHG performance standards should be designed to help trigger fuel switching in industrial processes and thus achieve a complete coal phase-out in the European power and industrial sectors by 2030. It will also need to outline a pathway to support industrial decarbonisation in line with achieving climate neutrality by 2040.

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7 In the context of adopting the European Climate Law in the European Parliament, there are discussions on adding wording in the Governance Regulation regarding the achievement of the EU industrial policy goals. At the time of writing this analysis the Climate Law has not been voted in the European Parliament yet. We do not know whether the Governance Regulation will be re-open or not.
6. Support and define sustainable and targeted uses of renewable hydrogen

What the EU Industrial Strategy says:

The Commission mentions hydrogen as an energy carrier like electricity, gas and liquid fuels, which “will need to be used more effectively by linking different sectors”. The Commission emphasizes the role of clean hydrogen by announcing a “a smart sector integration, which will also set out the Commission’s vision on clean hydrogen. The use of trans-European energy networks will also support the transition to climate neutrality”.

The Commission also announced the development of the “Clean Hydrogen Alliance” by Summer 2020, saying clean hydrogen is “disruptive in nature and requires stronger coordination across the value chain”. The Alliance will be “bringing investors together with governmental, institutional and industrial partners. The Alliance will build on existing work to identify technology needs, investment opportunities and regulatory barriers and enablers”.

WWF EPO and CMW comments:

The Commission falls short of defining what is considered ‘clean’ hydrogen, opening the door to harmful fossil fuel investments. It needs to focus on renewable hydrogen (solar and wind). Sustainability criteria for hydrogen must be developed, to be consistent with the rapid fossil fuels subsidies phase out.

There is also a need to define sustainable targeted uses of renewable hydrogen as it will play a key role in the decarbonisation of some EIs but its production is currently costly and resources are limited. Today, over 95% of hydrogen production is fossil-fuels based and not carbon neutral. Priority should be given to direct electrification with renewables and shifting away from gas where feasible.

Finally, the Strategy does not mention whether civil society representatives will be able to participate in the set up of the Clean Hydrogen Alliance, nor the next steps to

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8 The date has been announced by Commissioner Breton during the press conference on the launch of the EC Industrial Strategy (10 March 2020).
be undertaken for its creation. Civil society must be considered a **key partner** to ensure that the deployment of renewable hydrogen is targeted to those specific industries for which it plays an essential decarbonisation role, and prohibits the investment into new fossil fuels infrastructures (grey or blue hydrogen).

**7. Set out clear conditions and strict criteria for the deployment of Carbon Capture and Storage (CCS)**

**What the EU Industrial Strategy says:**

There is no mention of Carbon Capture and Storage (CCS) in the EC EU Industrial Strategy.

**WWF EPO and CMW comments:**

It is surprising that the Industrial Strategy does not even mention the existence of different potential mitigation measures such as CCS, which is highly favored by some EIIIs, especially the **cement industry**, to help decarbonise. For WWF and CMW, the use of CCS should be limited to process emissions for which there are **no alternative mitigation options**. This is because of the environmental and technological risks of CCS, as well as its high capital and operational costs. Any deployed CCS should adhere to **strict environmental and social safeguards** in order to minimise negative consequences.

Moreover, the Industrial Strategy must also define which technologies must be favoured based on the EU Taxonomy, and set priorities for decarbonisation where CCS is not needed, excluding investments in fossil-fuels.
8. Improve the carbon pricing framework &
Implement a Border Carbon Adjustment (BCA) only
as an alternative to free allocations

What the EU Industrial Strategy says:

There is no mention of a potential revision of the EU ETS in order to improve the
carbon pricing framework.

The text mentions that the Commission “will propose a Carbon Border Adjustment
Mechanism in 2021 to reduce the risk of carbon leakage, in full compatibility with WTO
rules” but only in the event that: “differences in ambition around the world persist”. The
Border Adjustment Mechanism (BCA) should be designed to support and strengthen
“our current tools to tackle carbon leakage”.

WWF EPO and CMW comments:

Emissions from EIIs have been stagnating in recent years. Therefore it seems strange
that the Commission does not mention the need to improve the current carbon
pricing framework. For WWF and CMW, carbon pricing can drive deep reductions in
EIIs carbon emissions only if it ensures that negative externalities of carbon emissions
are fully reflected in the price of pollution. In order to strengthen the current carbon
pricing framework, the industrial strategy should promote a reform of the EU
Emission Trading System. This reform will have to include the following elements:
increasing the annual reduction of pollution (the Linear Reduction Factor),
strengthening the Market Stability Reserve, mandating 100% auctioning revenues to be
used towards climate action and - last but not least - phasing out free emission
allowances.

Moreover, the health crisis linked to Covid-19 has resulted in a drop of the carbon
price to its lowest levels since July 2018 (16 euros per tonne), and while the market is
recovering at the time of writing (June 2020), a lower carbon price means less
exposure to the carbon price signal to incentivize emission reductions but also
reduced auctioning revenues for Member States and fewer resources for the ETS

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9 Reference to WWF EPO statement on the introduction of a future BCA.
Innovation Fund. Measures designed to avoid a rapid fall in the carbon price need to be introduced and made operational for Phase 4 of the ETS (2021-2030).

It is a cause of serious concern that the Strategy refers to the BCA aiming to support “our current tools to tackle carbon leakage” but that it omits to mention the phase-out of free allocations, even though the Communication on the European Green Deal clearly stated that BCA would be implemented as an alternative to free allocations and state aid measures. Should a BCA be introduced in the future, it would need to go hand in hand with a full phase out of free allowances to avoid windfall profits.

9. Ensure a well-designed Just Transition Mechanism

What the EU Industrial Strategy says:

The European Commission mentions in its Strategy that “as the transition picks up speed, Europe must ensure that no one is left behind”. Therefore, the proposal for the new Just Transition Mechanism “will mobilise €160 billion to ensure a fair transition for carbon intensive regions as they continue to transform their industries and economies”. Furthermore, the Commission mentions the launch of a “Just Transition Platform to offer technical and advisory support for carbon-intensive regions and industries”.

WWF EPO and CMW comments:

The reference to the support of the Just Transition Mechanism (JTM) for carbon intensive regions in the transition towards a net-zero carbon and circular economy is welcome. However, more should be included on the objectives and scope of the JTM. This mechanism must ensure a holistic approach to the transition and enhance an inclusive, resource-efficient and resilient society.

Ultimately, every community is affected by the transition towards climate neutrality, albeit on different timescales. Therefore, the JTM must facilitate the contribution of all local stakeholders to the design of the Just Transition plans. Such a community-led

Supplementary information:

10 See European Commission Communication on the European Green Deal, p.5.
process should go hand in hand with social dialogue within the industries affected and not be in conflict with, or be substituted by it.

Alongside market- and technology-driven changes, the JTM also requires a strong public investment plan. A recent CLG report\(^\text{11}\) highlights the risk that not aligning investments with decarbonising the economy will bring to employment (due to megatrends): job losses could be expected in the region of 10% by 2030 to 30% by 2050.

We welcome the creation of the Just Transition Mechanism but we believe that the entire EU budget, other EU funds, the EIB, ETS auctioning revenues, national and private investment funds, need to all align with its objectives to enable a comprehensive and far-reaching just transition. Finally, investments in fossil fuels (including natural gas and all fossil-derived gases) should not be supported and should be excluded from all other public funding. Otherwise such investments will generate stranded assets and send mixed signals about policy direction to investors, driving up the costs of transition and leaving vulnerable communities lagging behind.

The Just Transition Platform is different from the Just Transition Mechanism and will run alongside it by providing support to both carbon-intensive regions and industries. The JTM alone will not be able to deliver a just transition in industry. All public (and private) funds should align with the Just Transition objectives but so must policy. In order to ensure that the transition takes place in a fair and inclusive way, it will be crucial to work with communities and engage in social dialogue with workers.

The Just Transition Platform should be inclusive and transparent. It should be accessible to those implementing the transition on the ground and help exchange information. However, it must be clear from the start on the direction of the transition and what it means, in order to be effective. That direction must be to climate neutrality and the road must have people at its heart.

10. Further recommendations from WWF EPO and CMW

As an integral part of the Covid-19 recovery, the EU must continue the timely roll-out and implementation of the European Green Deal proposals announced in December 2019. This includes the decarbonisation of energy-intensive industries and a detoxified environment through the EU Industrial Strategy in order to build up resilient economies and societies in Europe. Industry is the backbone of the EU economy and the transition to low carbon approaches will provide the engine for continued economic growth in a decarbonised future. However, industrial assets often last 20–30 years or longer and many are due for renewal in the next few years. It is crucial that the EU puts in place the right policy framework and makes the right investments now to lay the groundwork for clean production technologies to be deployed over the next decade. If it gets this right, the EU will be able to create a long-term future for these sectors in Europe, securing jobs throughout the industrial value chain. Decisions taken today will have an impact on what is possible as far away as 2040. Recovery funding should, as much as possible, be geared towards helping EU industrial players transition to cleaner processes rather than locking in business as usual. It is utmost importance to:

- Make funding to energy-intensive industries (particularly large industrial companies) conditional on their having a carbon-neutral transition plan.
- Allocate dedicated funding and grants to low-carbon SMEs to help them strive for circularity and climate neutrality, with simplified conditionality requirements.
- Using the EU taxonomy to shape funding priorities and prioritise investments that add the most value to putting industry on a path to climate-neutrality, for example, ensuring that breakthrough pilots are able to go ahead.
- Design a clear do-no-harm commitment to exclude investment in fossil fuels (including gas and hydrogen powered by gas). This means not relying on the Projects of Common Interest tool (which contains numerous fossil gas and CCS projects).
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