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European
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Bureau

Initiating the third industrial revolution

**The need for a forward-looking policy framework
to speed up the transformation of
industrial production**

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The need for a forward-looking policy framework to speed up the transformation of industrial production

We are Europe's largest network of environmental citizens' organisations. We bring together over 180 civil society organisations from more than 40 European countries. Together, we work for a better future where people and nature thrive together.

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On 5 April 2022, the European Commission adopted their proposal for a revised Industrial Emissions Directive (IED)¹. Considering the new elements presented, it doubtlessly represents a step forward towards more innovative industrial processes. However, there are aspects to be further strengthened and clarified. **In this briefing, we provide our assessment on the new elements included therein.**

Industrial Emissions Directive (IED): the main EU instrument regulating the environmental impact of industrial installations. The IED lays down rules in order to **'prevent or, where that is not practicable, to reduce' and as far as possible eliminate pollution**, to protect the **environment and human health**. By doing so, it seeks to comply with the **'polluter pays' principle**, and the **principle of pollution prevention**, giving **priority to intervention at source**. The Directive also aims to **prevent accidents** and limit their consequences, to ensure the **efficient use of resources incl. energy**, to **prevent the generation of waste**, and to **avoid any risk of pollution upon definitive cessation of activities** (IED Recital 2, and Article 11). All environmental aspects are taken into account, as per the so-called **'integrated approach'**, which is one of the basic pillars of the IED. **Around 50 000 industrial activities of the most polluting and climate damaging sectors listed in Annex I of the IED are required to operate in accordance with a permit**. The permit conditions are based on the IED provisions, most notably the sector-specific EU BREFs.

EEB is publishing a series of briefings on different aspects relevant to the review of the IED.

All briefings can be accessed and downloaded here: <https://eipie.eu/briefings-by-eeb/>
Or scan this QR code:



¹ [The Industrial Emissions Directive - Environment - European Commission \(europa.eu\)](https://eipie.eu/briefings-by-eeb/)

Best Available Techniques Reference Documents (BREFs): industry-specific documents which define the most effective techniques that industry can employ to minimise the environmental impact of their activities – the so-called ‘Best Available Techniques’, or BAT. BATs are already per today’s definition technically and economically viable. The BAT conclusions (included in the BREFs) are used as a reference to set permit conditions such as emission limit values or other environmental performance levels, which conditions industrial installations must comply with.

Best Available Techniques – Associated Emission Levels (BAT-AELs):
the emission levels achieved by the application of BAT.

Best Available Techniques – Associated Environmental Performance Levels (BAT-AEPLs): the environmental performance levels achieved by the application of BAT.

Industrial Emissions Portal Regulation (IEPR): IEPR is the proposal for a revised Regulation establishing the European Pollutant Release and Transfer Register (E-PRTR), a Europe-wide register providing public access to key environmental data from industrial activities (incl. those covered by the IED). It is intended to implement the 2006 Kyiv Protocol on PRTRs, and refers to the triple objective of (1) enhancing public access to information that would (2) facilitate public participation in environmental decision-making, and (3) contribute to the prevention and reduction of environmental pollution. The current reporting interface is hosted by the European Environment Agency.

Background

The new industrial strategy for Europe² highlights the need for research, innovation, and investments for new technologies to strengthen Europe's industrial competitiveness and facilitate industry's shift to a truly sustainable, greener, efficient and more digital economy. In parallel, one of the main aims of the European Green Deal (EGD)³ is to drive the green transition of Europe's economy, incl. by creating markets for clean technologies and products, and sustainable, local, well-paid jobs.

One of the instruments to foster the transformation of European industry is the IED. The IED aims to prevent or, if not feasible, to reduce harmful impacts of industrial activity by mandating that large-scale industrial installations are permitted to operate according to strict conditions; these conditions are based on the performance of the best available techniques in the EU BREFs⁴. The IED therefore presents the potential to stimulate a deep agro-industrial transformation towards zero pollution through the use of breakthrough technologies, thereby contributing to the EGD's objectives of reaching carbon neutrality, increased energy efficiency, a non-toxic environment and a circular economy.

Key provisions of the revised IED proposal aimed at driving the transformation to a zero-pollution, climate neutral and circular economy:

- An **“innovation centre for industrial transformation and emissions”** (‘INCITE’ or ‘the centre’); INCITE should support innovation by collecting and analysing information on innovative techniques, incl. emerging techniques. The findings would also inform the drafting of EU BREFs (new Art. 27a);
- The development and application of emerging techniques is encouraged (Art. 27) e.g. by extending the validity period of temporary derogations (from permit requirements) to operators testing emerging techniques with improved environmental performance, extended from 9 months to 2 years (Art. 27b);
- Operators applying emerging techniques would have 2 extra years to comply with emerging techniques associated emission levels following the publication of BAT conclusions (Art. 27c);
- EU BREFs should be updated faster, if better performing techniques become available (Art.27a para2);
- Improved cooperating with researchers and industries in publicly funded research projects (recital 24);
- Operators are required to set out **“transformation plans”**, as part of their environmental management systems (EMS) (Art.27d);
- The EMS section (Art. 14a) also sets out the requirement on operators to set **environmental policy objectives for the continuous improvement of the environmental performance and safety of the installation**. The objectives and performance indicators in relation to significant environmental aspects, shall take into account benchmarks set out in the relevant BAT conclusions and the life-cycle environmental performance of the supply chain (Art. 14a para 2 point b).

² [Strategy \(europa.eu\)](https://eippcb.jrc.ec.europa.eu/reference)

³ [A European Green Deal | European Commission \(europa.eu\)](https://eippcb.jrc.ec.europa.eu/reference)

⁴ <https://eippcb.jrc.ec.europa.eu/reference>

EEB recommendations

The EEB welcomes the European Commission proposal for a revised IED. The main recommendations to promote more outcome oriented 'innovative' industrial processes are as follows:

I. Strengthen the role of INCITE and set directional Key Performance Indicators to clarify purpose of 'innovation'

The role of INCITE is very limited since it will inform only on the work programme and be consultative on the exchange of information. It is not clear if and how it will play any role in defining minimal key performance indicators (KPIs) for the mentioned benchmarks in the EMS section (new Art. 14a) or the minimal expected content of the "transformation plans". The introductory memorandum highlights that "New indicators will be set out in an industrial transformation scoreboard published by the innovation centre"⁵.

Those could be indicators that could provide 'transformative' technologies / performance, yet all is vague on minimal expectations: the proposal fails to clarify as to what those qualitative indicators are as well as the purpose of innovation. The current proposal instead seems to focus on short-sighted Technology Readiness Level (TRL) criteria only (see recital 24) but does not set criteria as to expected environmental performance outcomes compatible to the zero-pollution ambition set within the EU Green Deal. The Commission Proposal is silent on those key aspects that would ensure that "innovative techniques" serve the public interests and the IED goals (to prevent negative impacts at the source) and are aligned to the zero-pollution ambition. Finally, the European Green Deal sets out a "Green Oath" on decision makes that is not further internalised in the decision-making context. *Some possible headline KPI are proposed under recommendation no 2, which could be used as a screening scoreboard for INCITE.*

Furthermore, it would be useful to give a formal role notably to the EEA and ensure a balance of interest within INCITE (*see recommendation III*).

II. Effective Transformation Plans: translating good intentions to concrete zero pollution ambition actions

Achieving the EU objectives regarding a clean, circular and climate neutral economy by 2050 calls for a deep transformation of the Union's key industrial sectors. The transformation/transition plans/roadmaps with 2050 commitments are advocated by industry in various fora, notably the High-Level Group on Energy Intensive Industries and the Industrial Forum, hence the Commission's proposal on Transformation Plans (TP) is just formalising current initiatives. We welcome the forward-looking approach of the proposal, that shall demonstrate how installations will transform themselves 'in order to contribute to the emergence of a sustainable, clean, circular and climate-neutral economy by 2050' (new Article 27d). Moreover, we shall not forget that the transformation of the industry through improved environmental and human health

⁵ see section 5 "Other elements", page 16

protection rules, would further support the workforce and lead to the emergence of quality jobs where the industry itself becomes sustainable. Stricter standards would help attract investments to make the EU industry infrastructure fit for the zero-pollution ambition.

However, as the current proposal stands, the plans will be written up by operators for each installation and validated by auditors who will just formally check if minimum information (to be defined by the European Commission only in mid-2028) is included therein. There is **no control over the ambition level, effectiveness, and timeliness of these plans**. Hence, it is solely up to the operator's discretion to determine ambition, nature, pace, and scope of the transition. **No milestones/performance indicators** are set, **no specific actions** asked, **no monitoring** required. There is not even an option to review the plan's content by an authority, nor to review and update these plans in around 20 years of the transition period. Furthermore, the implementation of the TP depends on the good will of the operator. There is **no option for authorities to enforce** the inexecution of measures contained in the TP. Furthermore, **a 2030 deadline, the earliest for the submission of transformation plans by energy-intensive industries, is at odds with EU goals and planetary boundaries**.

Recommendations:

- Ensure an effective implementation and a possibility to enforce the TP by e.g., making its targets binding on the operator as part of their general obligations to be transposed into permit conditions (through amendments to Articles 11 and 14).
- Clarify the TP provisions, notably regarding:
 - the definition of performance pathways towards zero pollution, climate neutrality and a circular economy by 2050;
 - the definition of intermediate milestones and key performance indicators at sector level (for similar activities), concerning (at least) the following five headline objectives: (1) climate neutral economy; (2) zero adverse impact to health and the environment from anthropogenic emissions, and deposition and exposure below critical loads and levels; (3) transition towards a circular economy for a resource-saving EU economy operating within planetary boundaries; (4) phase out and substitution of chemicals of concern; and (5) restoration of good ecological and chemical status of water. The Innovation Centre for Industrial Transformation and Emissions (INCITE) should be involved in the development of the indicators;
 - a plan for investments and concrete actions with intermediate target(s), dedicated arrangements with staff for implementation and measurement of progress against the applicable intermediate target(s);
 - a firm commitment to review and revise the TP regularly;
 - the obligation to transparently report on TP implementation on a regular basis, etc.
- Advance the deadline for the first TP (e.g., 2025 or transposition deadline of IED, whichever comes earlier).
- Regarding critical infrastructure needs, where the main responsibility is upstream to the IED sectors (e.g., acceleration of renewable energy and green hydrogen deployment) the IED and related policy instruments should facilitate the sharing of efforts (see section 3 above).

- Due care is to be provided that the transformation process supports local and sustainable economic re-development, fully consistent with a socially acceptable 'just transition'.

III. **Revisit the process of drafting EU BREFs (the so-called 'Sevilla process')**

A review of the BREF review rules⁶, needs to be initiated by the European Commission without further delay and improved framework conditions brought through the revised IED text, notably to satisfy the following aspects:

- Scope extension of BAT-C to cover value chain considerations;
- Improved uptake of most effective (or innovative) techniques), notably through setting clear and outcome-oriented criteria for the selection of techniques constituting 'BAT candidates'; such criteria shall reflect the true technical potential and the focus on desired pollution prevention outcomes. BAT standards should be set based on the top 10% best performers and should not be undermined by 'technico-economic' considerations that shield operators, or political compromises among Member States. The EEB, like some industry groups, called for a review of the BAT determination method to clearly 'cut the best from the EU average rest', so that the BAT determination is more outcome focused. The suggestions circulated are to be found in our Position paper (31/05/2017) "[Comments and suggestions for improved BAT determination methodology](#)";
- Acceleration of decision-making and implementation, with particular attention devoted to the quality and usefulness of collected data;
- Adapt Annex III of the IED on the BAT criteria with forward looking / outcome driven KPIs that would improve the ambition levels of the BREFs (see recommendation 2 above or proposed KPIs in EII context [here](#));
- A better 'balance' of the different interest categories should be ensured , in particular industry v. NGO. Industry (operators) overcrowds the process, the decision-making rules should therefore be adapted so that public interests are served first. Whilst providing a formal role to the European Chemicals Agency (ECHA) is welcome, this should also include the European Environment Agency (EEA), they host the European Scientific Advisory Board on Climate Change which should provide good advice for the KPIs development, the content and ambition of the "transformation plans" but also the further EU BREF exchange.

⁶ Commission Implementing Decision of 10 February 2012 laying down rules concerning guidance on the collection of data and on the drawing up of BAT reference documents and on their quality assurance referred to in Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions



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