Detailed EEB draft input to IED Evaluation ***v2FIN***

Summary:
The EEB is the largest federation of EU citizens organizations and has been involved in the BREF process already under its predecessor, the IPPC Directive as well as under the IED. We were involved in the co-decision phase leading to the IED. Many of the concerns and proposals raised at that time have proven to be justified. Some viewpoints already made during the first review have not been picked up, we consider these points still relevant. Other comments relate to evaluation based on our experience with the IED framework so far. *These are not intended nor meant to be exhaustive and do not constitute the final position of the EEB in regards to any concrete amendments put forward.*

Political interference has led to certain **provisions undermining the IED objectives and its effectiveness,** in particular

- the specific derogation provisions for large combustion plants (Chapter III),
- the general derogation procedure under Article 15.4
- inconsistency of the outcome-oriented approach in relation to improved environmental performance of industrial activities
- misinterpretation of provisions allowing a short-sighted approach on addressing emissions (despite the integrated approach of the IED) – within the BREFs- but also in the implementation of BAT-C
- inconsistencies or insufficient clarity as to the achievement of Environmental Quality Standards
- non-compliance regarding Aarhus provisions (access to information, public participation)
- not fit for purpose reporting and inadequate access to information mechanisms
- arbitrary scope exclusions and inadequate formulation of its scope with deterring effect of not having a more holistic approach on defining BAT (sustainable industrial activities / ecological industrial transition framework).

From the experience gained from taking part in the **BREF review processes** (under the IPPC-D and IED framework) we conclude the following:

- the multi-stakeholder process based on an integrated approach to prevent environmental and human health impacts of industrial activities as intended by the IPPC / IED is unique and welcome;
- however improvements should be made in order to improve the BAT definition and the BAT-AE(P)L determination process, its ambition level, effectiveness and possible EU added value;
- the data basis mechanism / current approach has lost focus on defining technical achievable performance levels by the use of BAT, it rather reflects currently observed performance levels of average / "best" 30-40% EU levels performers with end of pipe focus;
- absence of providing data / or limited data should not lead to rewarding those industry sectors with the absence of BAT-Conclusions or the setting of "indicative" BAT-C.
- the IPPC BREF outputs were secured in a more time efficient manner. Overall the added value in ambition level of the revised versions under the IED is mixed, often it is of

marginal nature (pollutants addressed, upper BAT-AEL levels defined and practical impacts on techniques switching) compared to its predecessor IPPC-D version which defined BAT from scratch. Practical impact is undermined due to "existing plants" / "new plants" definition;
- more direction towards purpose-oriented outcomes with improved ambition level is missing;
- a need for improved governance and transparency structures and rules to ensure the public interests (higher protection levels) are served first.

These require a change in its framework conditions (including legal provisions) as to the information exchange itself, improved working procedures with much clearer goals and accountability for all players involved, including for the European Commission steering the process.

Many **shortcomings have been identified in relation to the implementation of BAT benchmarks**, giving too much flexibility to permit writers to just focus on the upper BAT-AEL laxist pollution levels (not reflecting real BAT) or even derogating from these. This leads to an approach where innovation or improved environmental performance in line with true BAT (the stricter BAT-AEL range) is not promoted. Permits review triggers are too restrictive. A fundamental overhaul of the Article 15.4 derogation procedure is required.
Public participation provisions are too restrictive for any meaningful and timely interventions at the permit review phase, certain provisions as to permit review triggers are not in line with the Aarhus provisions. **Provisions on access to information or reporting of the operators are not implemented in a satisfactory manner**, as shown in the EEB 'Burning: the Evidence report'. One key reason is **too weak and un-prescriptive requirements** on Member States to make best use of generated information and the mistake to not require an EU wide database approach that is fit for multi purpose, including enabling proper BAT based benchmarking and compliance assessment.

A fundamental overhaul of the EU safety net provisions is required. The EEB suggests a differentiated approach on BAT based ELVs based on the operation time and pollution intensities of the sector with real performance based pollution limits (useful outputs of industrial activity at lowest negative environmental impact) instead of just concentration limits in flue gas volumes. The introduction of **provisions to improve policy coherence e.g. climate protection such as Emission Performance Standards/Factors and clear binding nature of energy efficiency BAT-AE(P)L is also needed.**

Concrete suggestions to **improve the policy objectives of the IED are missing i.e. pollution prevention at source, compliance promotion with Environmental Quality Standards, stronger integration of promoting sustainable solutions under Environmental Impact Assessments, polluter pays and precautionary principles and provisions stimulating progress within the permitting phase or BREF determination**. A general question remains on how to set progress in the absence of data from frontrunners (because a technique switch was not required).

Finally some proposals are made to **redefine the scope of the Integrated Pollution Prevention and Control Recast framework. The BAT concept should compare various ways of industrial activities to deliver a public service or goods with no / acceptable negative environmental and human health impacts and promote the SDG goals**, the revised framework would thus constitute a framework for Environmentally sustainable industrial production or drive for the ecological transition of the EU industry. The COM should intervene more to improve the ambition level in particular where a policy framework setting those protection goals has been set. More holistic solutions to conduct an

industrial activity should be promoted instead of end of pipe approaches based on a pure "installation" (hardware) and boundaries level (e.g. instead of lower emissions from combustion plants for energy move to alternative modes of energy generation with better overall environmental profile per useful electricity/heat provided). Performance based BAT benchmarking (ratio of negative environmental impacts versus industrial activity output) should take more importance over technical abatement solutions approach under existing installations settings. Obsolete techniques or environmentally incompatible ways of carrying out industrial activities e.g. the use of fossil fuels or harmful substances in production processes which could be substituted should be ruled out from the start (i.e. through negative BAT), instead of setting BAT standards that would reduce its negative impacts or allow dilution of pollution to low concentration levels.

Considering the recommendations made below and policy recommendation to significantly reduce flexibility offered to Member States we deem that the revised framework should rather take the form of a "Regulation" in terms of choice of instrument.

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Detailed input by the EEB is structured according to the following main topics/issues:

1 Issues linked to Sevilla process

1.1 Sevilla process: KEI determination (scoping)

EEB Evaluation: the European Commission has been pushing for a concept called "Key environmental Issues" (KEI) in order to arbitrarily restrict the scope of the relevant BREF reviews. The KEI concept does neither exist in the IPPC-D Recast provisions nor in the BREF review rues itself. It is merely a workload management (reduction) measure that in effect reduces the practical impact of the BREF in terms of pollutants covered or issues addressed. Criteria to assess what is KEI have been introduced such as "relevance", "significance thresholds" or the like which are arbitrary and preemptive to any BAT-C made. This approach is a clear reversal of proof on those willing to have a larger scope and more comprehensive BAT-C (pollutants and issues to be covered): "evidence" is to be provided from the start even prior to the data collection. This concept is favorable to keep the scope of the BREF as restrictive as possible, and not to address all possible issues that are relevant from environmental protection or that the IED requires to address. Finally, significant time is lost in debating the KEI decisions instead of re-considering the focus after the data collection, meaning this approach is also counter-productive and time-inefficient.

Affected provision(s): Article 13, Annex III, BREF review rules, current practice

Policy suggestion(s): The KEI approach has to stop with immediate effect under the current format. The EIPPCB / COM services should instead spend that time and effort in delivering on improved performance benchmarks on the aspects listed in Annex III of the IED and take a broad approach as to the pollutants and issues covered. This requires earlier and deeper

exchange with the scientific community (universities, EEA) or other institutions e.g. ECHA through frontloading.

Should the focused approach be maintained we wish to remind about our points made in the "EEB paper on KEI determination 09/06/20017)" on policy suggestions.
The BREF review rules / the IED provisions should ensure that the following approach is implemented:

- Systematically address the SIN 2.0 and ETUC SVHC priority list (hazard-based approach) and check if that substance is occurring in the industrial activity subject to review;
- Systematically address all Annex II Air and Water substances based on intrinsic properties and without any "relevance" thresholds. For PBT / vPvB property chemicals the thresholds should be "detection limit";
- Special attention to be given to critical air pollutants included in the EU National Emissions Ceilings Directive and the Air Quality Directives; same with critical water pollutants categorized as 'priority substances' or 'priority hazardous substances' under the EU Water Framework Directive;
- Improved and mandatory consultation with ECHA in screening and shortlisting of relevant chemical substances as to use phase;
- Include GHG in the list of pollutants;
- Include ozone depleting substances;
- Address type of energy consumed in terms of environmental profile and wider resource consumption - more robust BAT conclusions on resource efficiency are needed, as the majority of BAT conclusions focuses primarily and highly on emissions;
- Address site remediation and accidents prevention, focus should be on soil (and groundwater) pollution prevention – Around 81% of annual national expenditures for the management of contaminated sites is spent on remediation measures, while only 15% is spent on site investigations[1].
- Effectiveness ranking to be made on the various BAT candidates in relation to possible achieved environmental and human health protection outcomes (see point 1.2)
- Clear principle of preference of emission prevention over emission reduction;
- Address human health related aspects occurring from the industrial activity itself e.g. the selection and use of certain harmful chemicals, diffuse emissions from the products or other outputs of the industrial facility.

The concept of focused approach may indeed by considered when discussing the ambition level of the BAT-C. We expect these to be proportionate to the need for preventing pollution from the given sector. It may therefore not be acceptable to have more laxist standards within one sector whereas the technical configurations or abatement potential in another sector are very similar e.g. air pollution standards differ in Waste Incineration, Cement, Lime and Magnesium Production, other combustion activities in Refineries, Iron and Steel, and Large Combustion Plants. The same rationale applies to water emissions.

1.2 Sevilla process: BAT determination (BAT definition, upper BAT-AEL) , BAT-AEPL

EEB Evaluation: The current BAT-AEL levels are based on currently observed average emission levels of EU reference plants on a given period of time by the use of certain techniques under certain permit conditions, not on the technical potential of various BAT candidates to prevent/cut pollution e.g. performance output at maximum technical abatement feasibility of a given BAT candidate or combination of various BAT candidates (or established BAT).
There is a practice to require at least one-year monitoring data, whereas this is neither required by the IED nor the BREF review rules. That high hurdle is not necessary in US rulemaking,

[1] http://publications.jrc.ec.europa.eu/repository/bitstream/111111111/30755/1/lbna26376enn.pdf

where representative stack tests of a few months of 10% of best performers in the participants pool can set the rule for the whole of a sector. Worse, the EIPPCB also has introduced the concept of "geographical distribution" or "representativeness" in Member States of given BAT candidates although the BREF review rules are very explicit that a BAT-AEL can be set on the basis of just one reference installation operating around the world, including the EU.

This means that the amount of data provided to derive a BAT-AEL can be very high, but from a qualitative perspective (ambition level of BAT) this approach is not of added value (loads of data to process, many installations claiming to be BAT and wanting to align the proposed BAT level above/to their level under Business as usual). The 'expert judgement' is not about what the various techniques could achieve in terms of environmental performance. Clear examples are when a BAT-C proposes a long techniques catalogue and adapting various BAT-AEL ranges to the technique options chosen by the operator e.g. emission level <X with technique A – emission level Y with the more common technique B used in the EU. Similarly, it may happen that two sets of BAT-AEL are set which are clearly differentiated to the techniques used (e.g. primary DeNOx / secondary DeNOx or various BAT-AEL depending variations of de-dusting techniques used ESP or Bagfilter). It is clear that the choice for operators to select certain techniques takes precedent over intended outcomes of the BAT-C. This is not in line with the outcome oriented "technical" focused approach. The opposite may also happen, that due to lack of data (either deliberate withholding or self-imposed "representativeness" hurdles) no BAT-C is derived meaning that the sector not pro-actively providing information is actually rewarded with the absence of environmental requirements.
There is no method in place as to where to cut the upper BAT-AEL level, it is often referred to as "experts judgement" but this is (unfortunately) not true. BAT-AELs (which become de facto permit limits) are often adapted to economic concerns by the operators. These cost claims are not backed up with any facts nor even put in perspective with possible public benefits. Irrespective of the above, this approach undermines the Art 15.4 derogation procedure – extremely generous and flexible for Member States-, where a second set of Cost Benefit Assessment (CBA) is conducted to circumvent compliance with stricter environmental performance requirements, despite already judged as "economically viable for the sector as a whole" (Sevilla level decision making, where industry interests are over-represented).
The current approach in setting the (upper) BAT-AEL creates frustrations from all stakeholders. A more robust and clearer BAT derivation methodology would bring considerable benefits not only in terms of enabling a quality performance assessment of the outputs (the BAT-C content) but also serve as a more transparent "expectations management tool" for all stakeholders involved in the decision making

The term of "emerging technique" is also not robust. There are cases where a technique considered as "emerging" at the time of the BREF review is since long emerged when the compliance deadline arrives: in general a BREF review takes at least 3 years, then up to 2 years can pass before the BAT-C are published in the OJEU, from that moment on there is an additional 4 year legal deadline for compliance. This means that in practice the data basis / technical considerations basis used for the BAT-AEL determination is already outdated by at least 9 years.
Finally, many BAT-Conclusions exclude through applicability restrictions certain categories of plants in terms of size or operating regimes. These exclusions are not based on technical arguments but "align" to lowest common denominator legal requirements that were politically agreed. Derogatory situations due to industry lobby have however nothing to do with state-of-the-art practice (e.g. the LCP BREF 1500 hours / emergency or chapter III exclusions for certain plants have been incorporated in the LCP BREF). The common assumption is that some Member States have already agreed through a political process that those sources would not be that "relevant" or of an issue to the environment. Yet this is certainly not true (in particular when considering that those plants are in a derogation mode from common pollution standards

and have frequent start up phases where high pollution occurs which is not subject to clear measures under the BREF). This means that the BREFs do not cover the full environmental impact of industrial activities.

Some BAT-AE(P)L have been labelled as of "indicative" value, the same has happened for certain monitoring parameters. The BREF should refrain to set "indicative" BAT -C (e.g. monitoring requirements or BAT-AE(P)Ls because these terms clearly undermine its legal status).
Further it is important that the BREF sets best practice and uses clear wordings as to the requirements to achieve a clear impact in implementation. Often clearer and more prescriptive BAT-statements e.g. requirements on indirect emissions monitoring, lower frequencies if emissions are "proven to be sufficiently stable" or rewording of text introduced in BAT-C as to unclear and subjective terms such as "relevance" thresholds were resisted on the basis of excuses that those wordings relate to "implementation issues". The real political agenda behind deletion or use of unclear text is however to enhance flexibility for Member States and industry to take a differentiated approach in implementing the BAT-C. This approach is not effective and counterproductive to the harmonization of standards to deliver improved ambition.

Affected provision(s); Art 3(1), Art 13, Annex III, BREF review rules, legal terms or text used in the BAT-C.
Policy suggestion(s): See EEB proposal on BAT-derivation methodology for more details. Some key principles are as follows:

- **The BAT derivation methodology should reflect the primacy of environmental protection within the IED on environmental protection outcomes to be achieved** (Clarify that the BAT concept to mean technical achievable performance levels, taking into account the integrated approach (cross-media impacts)
- **A clear methodology to cut the "true best" performers from average performance, with clear safety nets. Amend the legal provisions to require the BATAE(P)L to set performance levels that are technically achievable and to refocus on best environmental outcome focused approach. Establish a BAT ranking exercise and not allow multiple choice/free choice to industry to pick and choose less efficient techniques**
- **Cut-off points for the upper BAT-AEL range based on environmental outcome-oriented eligibility criteria should be set: i.e.**
    a) **Level 1 cut off point: compliance with previous BREF conclusions**
    b) **Level 2 cut off point: not to exceed any binding national rule (legislation) in force during the timescale of revised BAT-C compliance**
    c) **Level 3 cut-off point: the upper BAT-AEL is set at the technical feasible levels of a technique, only allow deviation and adjustments based on sound criteria in line with the integrated approach of the IED (adjustment could only be made on the basis of a demonstrated negative cross media effect, the effectiveness of a certain technique is compared to other competing techniques in terms of environmental performance outcomes (main ranking criteria)**
    - **A more flexible and forward-looking approach allowing information generated through specific stack tests / other information of BAT-Candidates to be used for setting BAT-C.**
    - **A fast track update procedure for emerging techniques / emerged techniques prior to publication;**
    - **A clear shift of debates about proportionality of costs versus benefits to be taken through Article 15.4 which should be plant specific and subject to public consultation, with much clearer framework conditions of what cost methods to use in order to rule out economic concerns only. Allow possible**

applicability restrictions based on strictly technical arguments or negative cross-media justifications (in line with integrated approach). Any cost implications to operators is to be compared against a full impact assessment for the benefits (health and environment) and compliance support of the EU environment acquis

- **Not allow arbitrary exclusions of certain plant sizes or BAT-C due to legal arguments e.g. "this issue is addressed elsewhere", rather check on whether that other framework sufficiently addresses the potential improvement potentials on pollution prevention/ reduction.**
- **Redefine the term of "existing" installation in line with the cut-off point of the reference year of the data used for BAT-derivation.**
- **Not allowing any "indicative" BAT-C (BATAE(P)L or monitoring)**
- **Clear prescriptive requirements on the BAT-C texts, as to issues / provisions that may affect the impact of the implementation of the BAT-C (e.g. enhanced compliance promotion, restricted flexibility for Member States permit writer to adapt BAT-C requirements due to vague wordings)**

1.3 Sevilla process: governance, neutrality and accountability

EEB Evaluation: Experience has shown various deficits in having a balanced view expressed between the various interest groups present. Article 13 of the IED states that the information exchange should be made between the following groups: industry concerned, NGO promoting environmental protection, Member States and the European Commission.

The unbalance is extreme when comparing the number of operators represented within the TWGs and the IED Forum; versus public interest groups NGO. It is correct that NGO involvement is limited mainly due to absence of dedicated resources which is a responsibility within the NGOs to overcome. Further only operators are presented within the "industry concerned" category, technique providers or other industry with conflicting interests are not directly presented within the "industry concerned" group.

Further to that, certain Member States did / still do nominate clearly industry affiliated "experts" to represent them in the TWGs. The worst example was in the LCP BREF review (see the Greenpeace report entitled: 'Smoke and Mirrors: how Europe's biggest polluters became their own regulators': https://www.greenpeace.org/archive-eu-unit/en/Publications/2015/Smoke-and-Mirrors-How-Europes-biggest-polluters-became-their-own-regulators/) but this practice has been nevertheless ongoing (e.g. PT, CZ, SK,UK, HU) had industry affiliated attending within the Member State delegation in some official BREF meetings. The Commission did recently clarify (IED forum of 27 November 2018) that Member States should not nominate industry affiliated groups to attend at these meetings under a Member States delegation, which is most welcome to address that clear conflict of interest point.

However a solution should be found on how diverging industry interests from the "industry concerned" group can be better balanced.

Irrespective of the unbalance of operators versus tech providers issue, the Member States are treated in preferential manner to the other NGO stakeholder group on the following counts:

a) Access to confidential business information (CBI)

MS representatives have also access to the CBI claims made by industry, but NGO do not. However NGOs cannot be considered as a competitor of the industry and should have equal access to the CBI claims / full dossiers as well. At least a list of the CBIs claimed incl. type of information and the reasons behind should be made available to both the MS and the NGO representatives.

b) MS have a voting power and can "overrule" consensus made at the TWG level

MS have considerable power to influence the outcome of the "technical" debates at the Final TWG by threatening with split views or voting against a certain outcome. Even if this is not admitted by the European Commission, a high number of oppositions raised by Member States delegates– due to political reasons to the benefit of economic concerns of their industry- has sometimes an overruling effect of technical based conclusions.

Member States can indeed vote against draft BAT-C if they disagree for whatever reason, in most cases political reasons because their industry is unhappy with the outcome and would rather prefer to accommodate the BAT-C so they would not even have to bother filing an Art 15(4) derogation. NGO do not have a "second chance" to amend the upper BREF ranges, which are the most relevant for the permitting phase. The derogation provision does – as it stands- only relate to exceeding the upper BAT-AEL, not the ELV setting within the range nor below the stricter BAT range, which in all cases reflect the true BAT level for the sector.

There is an aspiration to have consensus-based decision making. However this aspiration should be sub-ordinate to the objective of the information exchange itself or should not lead to an absurd situation where the lowest common denominator results as the "compromise". If there are technical facts which show that a certain pollution level is achievable then objections to the contrary or any weaker compromises should not be accepted, unless these are based on robust technical arguments (non-feasibility) or demonstrated negative cross-media effects in line with the integrated approach of the IED.

Economic or proportionality concerns such as benefits versus cost arguments of implementing a technique should not be allowed to weaken a certain BAT-C conclusion. This should only be addressed under the possible derogation procedure as per Article 15.4

Affected provisions: BREF review rules (or established practice), Article 13, other COM house-rules, Article 75

Policy suggestions: improved balancing of powers in the TWGs / IED forum / damage control by NGOs prior to voting (stopping political interference):

The following frameworks need to be put in place:

a) a conflict-of-interest policy so that the experts involved in the exchange on behalf of governments do not have links to the industry concerned – a clear prohibition that operators can act within the TWG on behalf of the Member States (in written submissions and for the official BREF meetings). The latter is settled by the European Commission (27 November 2018 IED forum).
   This should also include conditions and incentives that guarantee that the BREF authors will act in the public interest and their work outputs are aligned to the policy objectives of the IED. A BREF author pre—screening board should be put in place that includes a balanced representation of the Member States, the ENGO and the industry group;
b) rules enabling a balanced representation of interests -as currently industry is over-represented whereas NGOs are under-represented in the process-. If no equal seat allocation is feasible then the balanced representation should be ensured through giving more weight to NGOs (differentiated weighting in the consensus finding, more speaking time);
c) rules for the decision-making process e.g. for consensus finding when critical decisions are to be made. Consensus should mean consensus between the various interest groups present and not a number counting exercise of TWG delegates around the table.
   MS: the Council majority rules could be used, those countries that have implemented previous BREF standards should have a higher standing compared to counterparts that did not require their industry to implement the previous BREF benchmarks.

For the industry concerned group: it is proposed to split these in 3 sub-categories:
a) the operators
b) the technique providers (independent from the operators) and
c) the competing industry (e.g. specialised waste industry groups versus cement industry or operators of LCP versus Energy Efficiency solutions providers). These sub-industry groups should be represented in a balanced way. Due to certain concerns by technique providers not to upset their future clients it is proposed to set up a special working environment where these could contribute more frequently and freely: E.g. when applicability restrictions, costs or performance levels are challenged by the operators the technique providers should be able to provide a differentiated assessment only with a restrictive group (operators not present).

E.NGOs: because they are the most neutral stakeholder category vis a vis affected industry, NGO representatives should have a special power to balance a certain decision which does not meet consensus in a certain direction.

This could take the form of

Option a) a dedicated NGO objection right, based on outcome oriented criteria (as to suggestions in point 1.2) that can be invoked during the TWG and prior to the finalisation of the EIPPCB opinion contained in the Background documents.

Option b) establishment of "IED compatibility scrutiny board".

The IED compatibility scrutiny board, composed of public interest NGOs and chaired by an experienced NGO in the Sevilla process, should provide its favourable opinion on the final draft text submitted to the TWG (Background papers) and Member States prior to the vote (final draft BAT-C). Its opinion would change the voting pattern by the Member States.
Any requested change by a Member State or the European Commission would be considered by that IED compatibility scrutiny board. The consultation of the scrutiny board should take place:
Prior to

- the establishment of the opinion of the EIPPCB in the Background documents
- translation of the final draft BAT-Conclusion following the IED Forum in a draft Commission Implementing decision,

If the proposed amendment / proposal receives a favourable opinion (or no opinion), a qualified majority by the Member States in favour would suffice to adopt the amendment and the draft Commission Implementing text. In case of a negative opinion, that amendment / draft Commission Implementing text could only be amended and adopted if there is a qualified absolute majority of Member States in favour.

d) the same considerations as mentioned under point a-c) should also apply to the information exchange at Member States level i.e. BREF mirror groups, the IED Article 13 should be amended accordingly.
e) output performance indicators should be laid down on the Commission services in charge of organising the BREF reviews. These could relate to the following:

- time efficiency for publication in the OJ of the revised standard
- improvement level of the revised BREF as to scope, pollutants and issues addressed and in particular the ambition level compared to previous BREF (what is the possible added value for human health and environmental protection, ecological transition of the industry).

f) The voting by Member States to confer binding status of the BAT-C should be reconsidered. During the IED co-decision, the European Parliament proposed an automatic IED safety net extension/update procedure. There have been unacceptable moves to change substantive elements of agreed outcomes at Final TWG to the worse just because of threats of Member States not to adopt the BAT-C (following by intensive industry lobbying). Examples: the introduction of the Bubble approach for Refineries,

the exclusion of LLD and CHP plants from the LCP BREF scope. See proposal: **dedicated NGO objection right** and **establishment of "IED compatibility scrutiny board". The voting power by Member States should be reconsidered and conditional to purpose oriented interventions aligned to the IED objectives – not short-term industry interests.**

g) The involvement of independent scientific community should be promoted.

2 Issues linked to implementation of BAT benchmarks

2.1 Implementation: BAT standards (all)

EEB evaluation:

- The fate of existing (EIPPCB) BREF and the BAT-C contained therein are not yet clear as to legal status, some of these BREFs would not be reviewed any time soon. This means that the laggards in the sector are rewarded due to inaction or unclear legal provisions;
- Certain operating conditions are disregarded for certain sectors. E.g. the Large Combustion Plants may disregard the pollution occurring during start up and shut down periods, these are considered as "other than normal operating conditions" (OTNOC), this also applies for the monitoring regime, in certain cases measurements uncertainties are added by default. For Waste incineration the emission limit apply to "Effective Operating Time" (EOT). Worse, due to lobbying by the LCP sector, they even managed to achieve an absurd situation where any operation under start up and shut down would be considered as "not operating", yet environmental pollution may be even worse during those periods.
- Article 14 (1 a) is not clear as to whether all Annex II pollutants need to be subject to an Emission Limit Value where an emission of that pollutant occurs or only as to whether an ELV is only required where significant emissions occur from those pollutants or whether the significance thresholds refers only to other than the Annex II pollutants.
- The cases when public participation is required when permit reviews are carried out is too restrictive (wrong cross link to few cases in Article 21 permit review triggers) and in EEB's view not in line with the Aarhus requirements (see ACCC/C/2014/121 EU http://www.unece.org/environmental-policy/conventions/public-participation/aarhus-convention/tfwg/envppcc/envppcccom/acccc2014121-european-union.html) This means that the effective public involvement to promote BAT based permitting is severely restricted.
- There may be mis-interpretation issues linked to interaction between Article 21(3) and Articles 14(3)/15(3). Article 21(3) requires permits to be updated to comply with BAT-C within a maximum 4 years. Articles 14(3)/15(3) and provisions seem to be clear that BAT-C apply to all updates after BAT-C have been adopted or published. Some Member States treat updates before the end of a 4 year period as not needing to comply with the revised BAT-C (example was Aberthaw Power plant that due to illegal use of the TNP derogation had to revisit its permit when the revised 2017 LCP-BREF was adopted), yet the competent authorities ignored the 2017 LCP BREF BAT-C during its review process, stating they could do that review later. It should be more explicit that whenever a permit is reviewed after the BAT-C adoption, then the permit conditions need to comply with those revised BAT-C irrespective if the maximum 4 years compliance deadline is reached.

Due to unclear provisions the impact of the IED is less effective and/or not coherent with the achievement of policy instruments set under other EU policy instruments (Water Framework Directive, Aarhus Provisions, better reporting initiative)

Affected provisions: Article 3(13), Article 3(27); Article 13.7; Article 14(1) + (1)f, Article 21(3) Annex V part 3, Annex VI, definitions in BREFs or BAT-C on OTNOC.

Policy suggestions:

- **The COM should consider to (option a) adopt in the interim in the IED BAT-C format the existing BREF BAT-C from the IPPC Framework with a default innovation/improvement factor [20% pollution cut] applied, pending the publication of a revised version or (option b) adapt the EU safety net of the IED to confer binding status to updated BAT-C of the previous IPPC BREFs / or first set of IED BREFs if this approach would be more time efficient.**
- **Overhaul of the special conditions as to OTNOC situations. All industrial activities should be subject to up to date monitoring and pollution prevention measures, irrespective of the operating regime (Start up, shut down, non normal operating conditions etc). The IED should set minimal requirements for start up conditions : e.g. use of inherently cleaner fuels, requirement to have the abatement running at full capacity prior to boiler feed etc. Compliance assessment with ELVs should be harmonized in line with the lowest achievable "uncertainty" of best in class monitoring systems.**
- **Clarify Article 14(1) that an ELV shall be set when a given Annex II pollutant is emitted by the activity in question, irrespective of a threshold. Provide for annual mass flow-based performance limits (air and water).**
- **Amend Article 24(1)d to include all permit review situations.**
- **Clarify Article 21(3) that whenever a permit is reviewed after the BAT-C adoption, then the permit conditions need to comply with those revised BAT-C irrespective if the maximum 4 years compliance deadline is reached.**

2.2 Implementation: BAT standards (BAT-AEPLs)

EEB evaluation:

- Some Member States and industry consider that the BATAEPLs do not have a binding value, because only BAT-AEL are explicitly referred to under Article 21 and 15.3 of the IED. Yet Annex III clearly refers to performance level BAT (resource consumption, waste generation or energy generation) as does the large scope of the definition of BAT-AEL or ELV *(expressed as an average over a given period of time, under specified reference conditions / mass, expressed in terms of certain specific parameters, concentration and/or level of an emission, which may not be exceeded during one or more periods of time).* However certain BATAEPL have been declared as "indicative" in the BAT-C themselves (FDM BREF), meaning that the practical impact of the BAT-C is undermined.

Affected provisions: Article 3(10), Article 14(1), Article 15(3), BREFs concerned.
Policy suggestions :

- **See point 1.2. as to BREF determination** (The BREF should refrain to set "indicative" BAT -C (e.g. monitoring requirements or BAT-AEPLs because these terms clearly undermine its legal status).
- **Article 15 should be amended, where necessary, so to clearly refer to BAT-AEPLs as well.**

2.3 Implementation: BAT interlink with Environmental Quality Standards (EQS) promotion

EEB evaluation: As mentioned under point 1.2 and 2.1 the BREF themselves do not address in full the relevant pollutants so to achieve a more effective compliance promotion against the EQS. The main examples are water pollutants but also certain air pollutants (e.g. mercury).
If compliance with the EQS were to be promoted through the BREFs in a more coherent and effective manner, the BAT-C should provide for absolute prohibition of release or indirect release of certain pollutants for which a phase out is required i.e. the Priority Hazardous

Substances (PHS) pollutants under the Water Framework Directive, mercury under the Minamata Convention and its EU rules. *See section 1.2 as to how the EQS compliance could be promoted in the BAT-determination phase.*
Secondly, the IED states (in Article 15(4) that any derogation from the BAT-AELs should be "without prejudice" to the achievement of an Environmental Quality Standard, yet there is no clear mechanism in place on how that is to be ensured on the long run.
Finally, Article 18 requires Member States to provide for additional measures in the permit, in order to ensure compliance with the EQS but it is not clear what is meant concretely.

Affected provisions: Article 15, Article 15(4), Article 18,

Policy suggestions

- *See policy sections in section 1.2 as to how the EQS compliance could be promoted in the BAT-determination phase.*
- **When it comes to implementation of the BAT-C, any derogation procedure should be aligned to the necessity to not affect the compliance of any EQS in a negative way (see policy suggestions under point 2.4)**
- **The IED should lay down details of additional permit conditions that would be automatically triggered if a Member State is not on track to meet its EQS objectives e.g. Air quality / National Emissions Directive (NEC) ceilings, Water Framework Directive, Drinking Water Directive, Groundwater Directive, Natura 2000 objectives, Chemical policy objectives. Article 18 states that stricter measures need to be set in the permit, but it does not detail these. The IED could set in its Annex a set of permit conditions that would have to be complied with automatically when the EQS compliance pathway is compromised. This could take the form of reduced operating hours, absolute pollution load caps per industrial output, fuel switch obligations, automatic ELV alignment to the stricter BAT-AEL range set for new plants, minimal abatement efficiency rates, prohibition of extension of capacities etc which would be targeted to the specific EQS objectives and sectors.**
- **A clear link to compliance pathways with the NEC ceilings or deviation from National Air Pollution Control Programmes should be established in the IED, policy objectives as to the substitution of Substances of Very High Concern (REACH) shall be considered as an EQS.**

2.4 Implementation: BAT derogation Art 15.4 related and ELV setting

EEB Evaluation: The article 15.4 derogation article is significantly affecting the effectiveness of the IED and undermines the BAT based permitting concept. Recent experience shows considerable abuses by Member States permitting authorities (time winning exercise to the benefit of the polluters, lack of any justification for laxist approach, biased cost-benefit assumptions, absence of public participation procedure etc). Because of in-clarity as to how to evaluate the proportionality of the costs versus the benefits each Member State takes its own approach, meaning unlevel playing field for industry and differentiated protection levels for EU citizens. Because ecosystem valuation is lacking, environmental protection and public interest benefits are underestimated. The absence of clear framework conditions and criteria such as no time limit for any derogation, the absence of clear procedures and general lack of transparency and public involvement in the decision-making means that a pandora box of abuses has been offered to the benefit of polluters. Further, the derogation procedure is too restrictive. It only applies to the upper BAT-AEL level, not to the deviation from the true BAT level (the stricter BAT-AEL range).

Affected provisions: Article 3(10), Article 14(1), Article 15(4)

Policy suggestions: The EEB objected to the derogation procedure as it stands. Considering that the true BAT performance levels are only represented in the BAT standards set for the "new plants" or the stricter BAT performance ranges in the IED BREFs the following suggestions can be made:

Option a) deletion of Article 15.4

Option b) [preferred option subject to below improvements are taken up in full] fundamental overhaul of Article 15.4, incorporating the main suggestions made by the EEB such as referred to under scenario 3 of the suggestions on CBA methods for various Framework scenarios under the IED

- **Oblige a derogation procedure for any deviation from the stricter BAT-AEL and BAT-AEPL levels set for "new plants";**
- **Use the EEA VSL method adapted to the US EPA price levels (7.15 Million €) method when quantification of air pollution costs;**
- **Mandatory quantification of likely impacts of various compliance scenario against compliance with Environmental Quality Standards (effectiveness ratings);**
- **Cost benefit assessments should be based on the effectiveness of the abatement efficiencies of the techniques, only cross-media impacts should be considered to allow derogations;**
- **Automatic rejection if BAT technique / performance level is achieved in 3 or more installations in the EU;**
- **Full trans-boundary impact assessment and pre-consultation with at least 3 independent techniques providers on the cost scenarios put forward by the applicant;**
- **Mandatory public participation when all options for decisions are still open and full transparency on the justifications provided;**
- **Maximum 5 years validity date of any derogation.**

2.5 Optional nature of Energy Efficiency performance benchmarks / GHG exclusion

EEB Evaluation: Due to the EU ETS Directive (Article 26), addressing GHG through the IPPC-D / now IED were removed from its scope. Because of the EU-ETS, Article 9(1) states that all permits for installations covered by the EU-ETS should not set an emission limit for GHG emissions 'unless significant pollution is caused'. The main argument of industry against addressing GHG in the BREFs / IED is "double-regulation", whilst the EU ETS sets a price level on carbon allowances which is not based on the BAT concept.

A much more effective approach would be to set performance-based standards on GHG emission reduction/ prevention combined with market-based instruments, such as EU-ETS but also in combination with further economic instruments.
The same considerations apply to Energy Efficiency. Whilst Energy efficiency performance benchmarks are set in the BREFs, the EU-ETS provisions (Article 9(2) of the IED) leaves the implementation of those requirements "optional" to Member States permit writers.

This situation is ineffective and counter-productive to promote the climate protection and resource efficiency agenda. Significant improvements could be achieved through mandatory minimal energy efficiency requirements and GHG performance standards for the main emitters, in particular fossil fuel combustion installations.

Affected provisions: Article 9(1) and Article 9(2). EU ETS system

Policy suggestions:

- **Delete Article 9 / amend the EU ETS system to enable a combined approach of command and control (IED) as well as market based instruments**
- **Introduce minimal binding energy efficiency standards based on best in class solutions within a given industrial activity (e.g. electricity, heat generation);**
- **Introduce GHG performance standards to achieve a complete 2030 coal phase out in Europe;**
- **Introduce an Emission Performance Factor (EPF) which would increase the carbon price set under the EU-ETS. The EPF would be a BAT performance-based multiplication factor to be applied to the purchasing of EUA allowances, alternatively a derogation may be considered for those Member States that have environmental pollution tax systems in place that would provide for the same effect (internalization of externalized costs, including due to GHG emissions).**

3 Access to information and public participation provisions

3.1 Online databases (access to information), better reporting

EEB Evaluation: A recent report of the EEB "Burning: the evidence" revealed that there is a huge variation in the way how Member States provide information to the public on industrial pollution, compliance promotion and permit related information. Many of those systems are not user friendly nor adequate to enable proper benchmarking of industry and compliance promotion. Improvements are needed, with clear preference for an EU centralized system that is fit for purpose and makes use of 21st century IT tools. The IED provisions related to access to information and use of information generated through the IED have been subject to intense negotiations, which led to this unfavorable outcome because too much flexibility is left on Member States to design their system in the way they want. The EEB suggests quick fix solutions that should be taken up within the upcoming IED registry and a review of the E-PRTR.

Affected provisions: Article 14, 24 of the IED, E-PRTR, IED Registry and its reporting decision EU 2018/1135.

Policy suggestions:

The EEB recommendations of the Burning the evidence report (see page 33 -35) shall be fully implemented within the IED provisions, this included notably:

For national systems: a prohibition to apply fees, features similar to the Irish and Norwegian portals.

A centralized EU portal should be set up (IED registry / improved PRTR) with the following:

- **Powerful search functions with a minimum set of search filters**
- **Single plant specific pages to contain: consolidated permit in force, inspection reports, annual compliance reports, release data information (air/water flow rates), production outputs data, ELV information to be directly reported through an IED electronic permit template, operators**

should be able to report continuous emissions monitoring data directly to be uploaded to the EU database, Article 15.4 derogation status

- **Obligation to provide (up to date) information on upcoming permit review decisions and status**
- **Specifically, on Article 15.4 derogations, the full justification and details of the CBA should be made publicly available on a timely manner, meaning before a decision is actually taken e.g. at least 2 months prior to the decision.**

The relevant IED/PRTR provisions should be amended accordingly.

3.2 Issues linked to effective public participation

EEB Evaluation: Public participation is also too limited due to a narrow interpretation by certain Member States. The cases on when public participation is required in permit reviews is too restrictive and in EEB's view not in line with the Aarhus requirements (see ACCC/C/2014/121 EU http://www.unece.org/environmental-policy/conventions/public-participation/aarhus-convention/tfwg/envppcc/envppcccom/acccc2014121-european-union.html)

Certain countries also inform the public concerned after a derogation decision has been granted or refrain from providing that information on time, when all options for decision making are still open. This practice also relates to intransparency (see point 3.1). Member States also consider that no public participation is required when the ELV setting is within the BAT-AEL ranges, yet there is a fundamental difference on whether the lower BAT-AEL or upper BAT-AEL ranges are implemented. This means that the effective public involvement to promote BAT based permitting is severely restricted.

This limitation applies also to the details of the decision-making basis underlining any Article 15(4) derogation procedure. The IED requires that the public participation is to be conducted in "early and effective" manner. In order to make informed decisions and to enable the public to exercise its public participation rights to the fullest extent, the IED could therefore be more explicit that all details relating to the CBA and decision making steps relating to any Article 15.4 derogation should be made publicly available on a timely manner, meaning before a decision is actually taken e.g. at least 2 months prior to the decision.

Affected provisions: Article 15(4), 24 and Article 21 / Annex IV.

Policy suggestions :

- **Amend Article 24.1 and 21 to oblige public participation when all options are still open, with minimal deadlines prior to reviewing the permit**
- **Oblige public participation whenever a deviation from the stricter BAT-AE(P)L / "new" plants BAT levels is proposed (see point 2.4)**
- **all details relating to the CBA and decision-making steps relating to any Article 15.4 derogation should be made publicly available on a timely manner, meaning before a decision is actually taken e.g. at least 2 months prior to the decision.**

4 Issues linked to EU Safety net provisions

4.1 EU Safety net (LCPs)

EEB Evaluation: The IED suffers from unacceptable provisions that did reward the laggards of EU's biggest polluters. These are visible in the shopping list of derogations for stricter air pollution provided for under Chapter III (TNP, LLD, SiS, CHP derogation, high sulphur lignite derogation etc). Many Member States and its operators have taken advantage of those optional derogations to the detriment of environmental and human health protection.

Whilst all those derogations should end by 2024 – including the desulphurization rate derogation, the damage caused to public health and the environment by this laxist approach should be repaired on the basis of the basic principles of equity and justice and retroactive application of the polluter pays principle.

The Annex V ELVs are outdated, further they are not in line with the objective to set the state-of-the-art performance levels for certain industrial activities. The current approach (mainly due to the setup of the Annex I) is aimed to secure fuel choice considerations for Member States and certain industry but does not promote the ecological transition. Rather the Annex V minimal requirements should set real performance level of environmental impacts versus useful service provided (electricity, heat, mechanical energy provided), that is the intended purpose of combustion plants.
When the revised IED would take effect (2028 is expected) coal combustion would no longer be relevant and should in any case not be BAT. However, for other fuels such as biogas or biomass that may still be relevant after 2028, the compliance regime should be adapted. Some Member States have adopted compliance assessment schemes where the operator may add extra pollution allowances labelled as "measurement uncertainty". Uncertainty reported in the standards is from the validation of the standard and generally was performed many years ago. It has nothing to do with the low uncertainties achieved by experienced laboratories/measurement companies in practice. This practice is certainly not acceptable in light of the Diesel gate and to ensuring an equal level playing field for industry, a reality check is therefore required.

Affected provisions: Article 3(27); Chapter III, Annex V, Article 72, (provisions on measurement uncertainties)

Policy suggestions:

- **The IED should introduce a compensation mechanism to recuperate the external damage costs caused to human health and the environment by those Member States that accepted to grant the derogations. The system should ensure that the operators or mother companies that benefited from the derogation shall pay / be held accountable for damage cost caused by this extra pollution due to the derogation granted. This could take various forms:**

  Option a) Member States that made use of the derogation mechanisms shall require the operators that benefited from that derogation to make up for the excess air pollution by subtracting the pollution excess allowance compared to "as if LCP 2006 BREF compliance scenario" . The pollution load can be easily calculated and operators benefiting from that derogation are known.
  Those operators or mother companies shall be required to compensate for that excess pollution through either

- compensation through equal pollution reduction achieved under beyond BAT compliance (recovery of pollution quota) in other installations owned by the same mother company or
- paying a compensation fee based on the EEA external damage cost factors due to the extra pollution generated under the derogatory permitting regime (retro-active polluter pays cost recovery).

  Option b) Member States that made use of the derogation mechanisms shall demonstrate that the external damage costs generated by that derogatory approach has been fully recovered by the operators through

other compensational measures within their industry e.g. Air pollution charge system and or minimal carbon price floors / EPF applied to those companies.

- **Annex V shall be revised to provide for performance-based emission limits expressed as x g Pollutant / KW electricity or useful heat output and not differentiate according to fuel types.**
  - **Fossil fuels combustion should be ruled out as unsustainable / if legally not possible due to Treaty considerations, new emission limits and technical requirements should be set in such a way that it is practically not possible / economically not viable to continue operating with those fuels (but from legal perspective it is not a fuel ban).**
  - **The compliance assessment regime needs to be reviewed and measurement uncertainty adapted to state of the art accuracy levels of automatic monitoring systems. The COM should not copy-and-paste the uncertainties documented in the standards but undertake research regarding the best performing monitoring with lowest uncertainties. This involved rapid revision and validation of standards (support of CEN by the COM) to improve standards where the uncertainty is documented as high. A current relatively high value of uncertainty should not hinder to set low BAT AEL, in particular where lower uncertainties have already been achieved in practice.**

4.2 (other sectors)

EEB evaluation: Article 73 of the IED is the remains of the initial proposal of the European Parliament to provide for an "automatic adaptation" of the EU binding minimal requirements (EU Safety net) to be aligned to the middle of the BAT-AEL ranges set in the revised BAT-C within one year. This approach was strongly supported by the EEB. Due to negotiations with Council and the European Commission, the requirement to periodically review the need to review the EU safety net is now subject to a discretionary assessment by the European Commission every 3 years, which is regrettable. Yet there is a clear obligation to adapt the binding requirements set in the Annexes of the IED to technical progress based on the impact of the activities on the environment and state of implementation of BAT for the activities concerned. As long as the Article 15.4 derogation procedure remains, it is unavoidable to regularly update the binding ELVs in a pre-emptive manner, in order to limit potential damage caused through the application of Article 15.4 derogations. Recital 41 requires the Commission to address pollution from heavy metals and dioxins and furans in particular.

Affected provisions: Chapter 3 and following and Chapter V and following, Article 73.

Policy suggestions

- Align the EU Safety net levels in Annex VI for co-incineration (cement plants) to the same levels as dedicated waste incineration plants
- Introduce EU Safety net binding requirements for iron and steel plants in line with BAT performance, in particular relating to SO2, dust and heavy metals emissions from sinter strands with clear shift to conversion to Electric Arc Furnace. Provide for other provisions to shift alternative ways of primary steel making mandatory use of renewable based energy sources (e.g. renewable hydrogen)
- Introduce safety net provisions on chemical industry, in particular in relation to emissions to water and air pollutants and production of Substances of Very High Concern
- Introduce safety net provisions in regard to polymers production

- Set minimal binding requirements on Refineries, in particular on air and water. Withdraw possibility to use the bubble approach or introduce correction factor of 0.5. Provide for controls to prevent potential combustion of distillation residues / HFO with sulphur content exceeding 50ppm in other stationary or mobile combustion appliances. Controls could take the form of minimal output quality requirements as to the fate of those products/waste residues of the refining activities
- Review need to include other minimal provisions for other sectors where environmental improvement potential exists / differentiated standards in Member States are implemented.

5 Strengthening of policy objectives: rewarding frontrunners, promoting innovation and implementation of basic principals in environmental policy

EEB Evaluation: The current framework does not provide incentives for the ecological transition of EU industry. The current BAT determination, due to the setup of its scope and current practice, does not promote for more holistic transition of the industry to sustainable industrial production. The aim should not be "less emission" or "reduced environmental impacts" from the installation but rather to find solutions that could provide no negative environmental impacts whilst providing the intended output of the industrial activity as a whole (service, product output of the industrial activity). A long-term perspective of the advantages of various BAT candidates proposed should therefore be taken. The basic principles of pollution prevention first, precautionary principle and polluter pays are to be fully implemented. There are no mechanisms in place which would reward those operators that are fully complying with EQS objectives or that made genuine efforts and investments to improve their environmental performance beyond legal requirements. Current experience however showed that the BREF revision is rather an adaptation exercise for the laggards in the sector to catch up, not an innovation driver. This is probably linked to the current scope setup of the IED (see point 6)
The relative contribution on environmental pressures by the industrial activity in question is to be put in context with other actors contributing to the same environmental pressures. A prioritisation could start on the basis of policy objectives set at the international level e.g. SDGs, specific pollutants of transboundary concern, media oriented protection frameworks of international relevance e.g. water / air quality protection, use of certain chemicals etc.
This would allow to identify the main challenges posed at a global level from industrial activities and other human activities, assess the environmental and human health pressures caused by IED activities and make the link with the targeted objectives. This would allow a prioritization for further actions to be taken and required ambition level.

Provisions on non-compliance are very weak as well as penalties. In certain countries (e.g. RO), highly polluting LCPs are operating without a valid permit. Further the penalties set up in certain countries fall long way short of the requirement to have "effective proportionate and dissuasive'. A mechanism should be put in place to ensure that installations operating in non - compliance with the EU-standards shall be fully liable to the cost recovery principles due to the excess pollution.

Affected provisions: n/a, Art 7, Art. 9, Art 79

Policy suggestions

- Indirect taxation scheme for air and water pollutants could be introduced. Due to lack of EU competence it could be considered to set in the EU safety net differentiated ELVs or requirements if a Member State would design effective economic instruments or other measures, which would drive for innovation to "beyond BAT performance" or the achievement of "depollution" of the environment e.g. where the industrial activity

would provide for cleaner waste water discharge quality parameters compared to the intake waste water of the same water stream
- The penalties and non-compliance provisions should be strengthened to have a meaningful effect, a specific review is necessary. Consider for IMPEL to be able to order immediate suspension of a given activity where the national authorities fail to take timely action. A parallel can be made with EU competition law, which allows fines of up to e.g. 10% of the undertaking's global turnover
- A mechanism should be put in place to ensure that installations operating in non - compliance with the EU-standards shall be fully liable to the cost recovery principles due to the excess pollution caused.

6 Redefinition of scope of the IPPC Recast / BAT based benchmarking

EEB Evaluation: As referred to under point 5, the current framework or BAT determination procedure due to the setup of its scope and current practice does not promote for more holistic transition of the industry to sustainable industrial production. The aim should not be "less emission" or "reduced environmental impacts" from the installation but rather to find solutions that could provide no negative environmental impacts whilst providing the intended output of the industrial activity as a whole (service, product output of the industrial activity).
Some examples:
Example 1: the current phrasing of Annex I .1 (Energy) only allows to benchmark the combustion of fuels in installations with a rated thermal input of 50MW or more.
A sensible (holistic) benchmarking would compare various techniques / ways to generate a certain amount of energy with possible differentiation on whether this relates to heat, electricity or mechanical energy. This would allow to compare non combustion techniques (normally with much better environmental profile) with combustion techniques (generally with worse environmental profile). The current setting also enables abuses where fuel choice considerations overtake the intended environmental objectives to be achieved by a given industrial activity. In the LCP BREF review, the EEB was not able to promote the common use of heat buffer tanks in CHP fossil/biomass fueled (heated with surplus wind energy) which would prevent start up / reduce operation of that solid fueled CHP with its associated air pollution. The main reason was that the electro boiler heat buffer tank in a CHP is not considered a 'combustion plant', and although directly associated to the activity in question would be out of scope of the LCP BREF (in the understanding of other stakeholders).

Example 2: production of asbestos is still listed in Annex 3.2, this activity should be clearly prohibited due to the obvious negative health impacts it caused.
Example 3: aquaculture (large scale fish farms) generate a lot of pollution but are not included in the IED. Cattle rearing is the largest EU source of methane emissions. Yet this activity is excluded whilst pigs and poultry are covered. The thresholds set for those activities are quite arbitrary.
Example 4: production of pesticides or biocides in Annex I 4.4 should be replaced by "sustainable integrated pest management". This way various options to protect crops – which would be more environmentally and human health compatible than the chemicals solutions designed to kill-, would be compared as well.
Example 5: the section 5 on waste management should be replaced by "residues management", with a cascading of solutions ranking in terms of the Waste Hierarchy.
Example 6: the gypsum production industry should be included as well, the processes are similar to cement and lime. Further road construction (asphalt, to promote nonpetroleum-based renewable sourced asphalt alternative techniques) should be covered as well.

Other positive examples allowing a broader comparison exist e.g. Food Drink and Milk production, Textiles production.

The scope should be revisited to redefine industrial activities in terms of functions / products provided to society, especially where there are competing solutions with various environmental and human health footprints (as the considerations listed in the BAT Criteria of Annex III). The issues to be addressed should be those of main relevance to specific needs of the 21st century, the SDG goals and the 7th / 8th EAP could give some guidance as to what these could be. The Sectoral Reference Documents (SRDs) on Best Environmental Management Practice provide an interesting approach, some are highly relevant to IED activities[2].
A possible non-exhaustive list to be further refined could be as follows:

- **Energy production**, exceeding a net useful output of X MW/annum expressed as mg of pollutant / KWh net output (electric, heat, mechanical heat) whilst considering other environmental impacts such as water consumption, resource consumption, waste generation.
- **Energy conservation** in households and industrial processes, achieving net savings of XXX MW/ annum
- **water services** (water quality and conservation measures), where this relates to processing / providing XXX m³ of water/annum or achieving water savings of YYYm³/annum
- **Soil remediation activities and biodiversity protection measures**
- **Sustainable transportation of goods**
- Industrial solutions for **improved air quality**, where measured improvement is XXX µg/Nm³
- **Production of food** with net ecological footprint lower than XXX
- **Production of drinks**
- …

Affected provisions: Annex I, Article 1 of the IED

Policy suggestions

- include aquaculture, cattle, differentiated thresholds for poultry
- Redefine the scope of Annex I to enable the IED / BREFs to take a different approach: setting BAT for best ratio environmental impact of industrial activity versus public service provided. E.g. Energy generation, clean water services, Food -Drink Production, Agricultural practices…

[2] http://ec.europa.eu/environment/emas/emas_publications/sectoral_reference_documents_en.htm