

Towards an improved policy on industrial emissions

CEWEP congress
Bordeaux, 12 June 2008



Content of the presentation

- **Background to the proposal**
- **The Commission's proposal – why and what?**
- **How to find out more**

The current situation

European Industry is subject to a range of industrial emissions legislation....

IPPC Directive

Waste Incineration
Directive

Directives related to the
titanium dioxide industry

Large Combustion Plants
Directive



Directive on the limitation
of emissions of VOC from
solvents

European Pollutant
Emission Register
(EPER) and the
European Pollutant
Release and Transfer
Register (E-PRTR)

This makes enforcement at Community level very difficult and leads to unnecessary administrative burden

IPPC Fundamentals

- Focus on **prevention** of pollution and, if not feasible, **minimisation**
- Installations must operate according to an **integrated permit**
- Permits should contain **ELVs based on BAT** with the possibility to take into account certain local conditions
- BAT information exchange leads to the BAT Reference Documents (BREFs), adopted by the Commission
- The Public is provided with access to information
- Final deadline for implementation: **30 October 2007**
- Supplemented by “sectoral” Directives setting **minimum requirements** (ELVs, monitoring)

The Commission's IPPC review

- The review began in early 2006, with data collection taking place over the following two years.
- The main focus of the review was **10 key studies** that focused on:
 - **horizontal** issues including implementation, environmental benefits, impacts on competitiveness
 - **sectoral** issues including **waste treatment**, agriculture, **waste incineration** and large combustion plants
- Approximately **100 case study installations** were analysed
- The entire review process was overseen by an **advisory group** comprising stakeholders from Member States, industry and NGOs

Concerns with the status quo

The Commission's review identified **5 main areas of concern**:

- 1) Insufficient implementation of Best Available Techniques (BAT)**
- 2) Limitations with regard to compliance enforcement and environmental improvements**
- 3) Unnecessary administrative burdens due to complexity and inconsistency of parts of legal framework**
- 4) Insufficient scope and unclear provisions to achieve the Thematic Strategy objectives (air, waste, soil)**
- 5) Constraints on the use of more flexible instruments, such as NO_x and SO₂ emission trading systems**

The Commission's Solution

- The 5 key areas of concern require action to be taken in the form of:

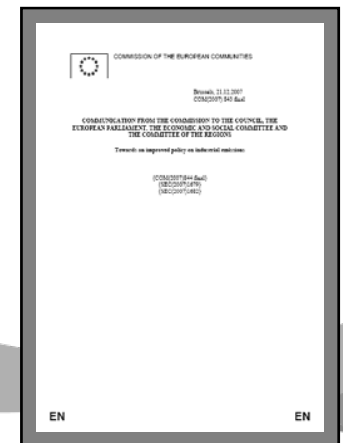
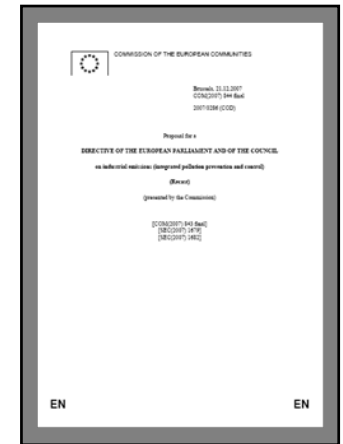
- 1) Revision of the current legislation on industrial emissions through simplification, clarification and strengthening

Commission's proposal for a **Directive on industrial emissions** (integrated pollution prevention and control) (COM(2007) 844 final): recasts 7 Directives into a single Directive

The proposal is supported by an **impact assessment**

- 2) Reinforce the Commission's existing Action Plan on implementation

Commission Communication "Towards an improved policy on industrial emissions" (COM(2007) 843 final)





The Commission's proposal for a Directive on industrial emissions (IPPC)

Scope of recast

- **Through the Commission's proposal for a Directive on industrial emissions the following legislation is recast into one single act:**
 - Directive 2008/1/EC concerning integrated pollution prevention and control (IPPC)
 - Directive 1999/13/EC on VOC solvent emissions (SE)
 - **Directive 2000/76/EC on waste incineration (WI)**
 - Directive 2001/80/EC on large combustion plants (LCP)
 - Directives 78/179/EEC, 82/883/EEC and 92/112/EEC related to the titanium dioxide industry
- **The new act passes through the full legislative process and repeals all the acts being recast**

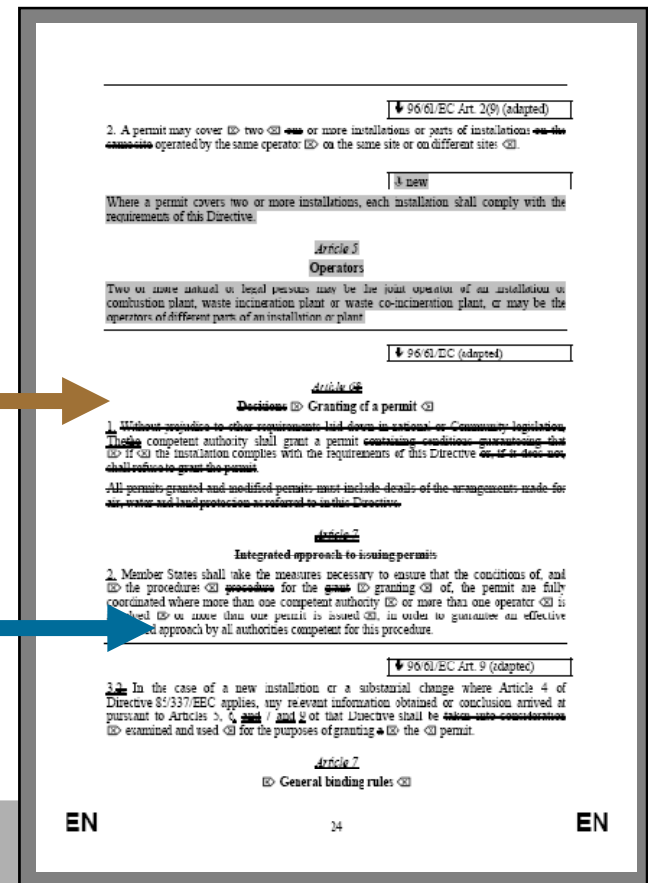
The Recast process: 3 types of amendments

Substantive amendments that are grey shaded are **discussed and agreed** during the co-decision process

Adaptations are indicated by markers   and in principle, these elements are **not discussed or amended** during the co-decision process

A **minor change** is usually editorial in nature and these elements are **not discussed and agreed** during the co-decision process.

Unchanged text is not open for discussion!



What remains....

- **high level of environmental protection**
- **integrated approach**
- **Best Available Techniques**
- **requirement to have a permit**
- **information of the public**

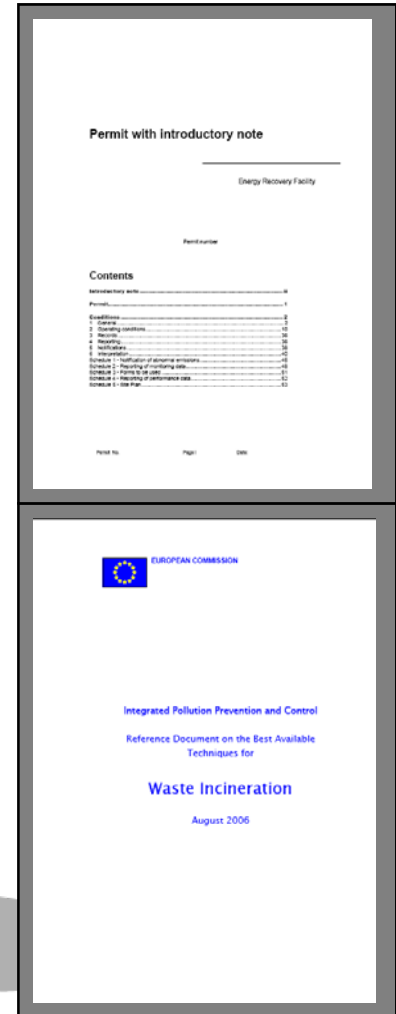
... while tackling the main issues of concern ...

Issue 1: Insufficient implementation of Best Available Techniques (BAT)

Permits issued to operators must contain BAT based permit conditions (Article 16(2))

BREFs shall be the reference for setting the permit conditions (Article 15(3))

Permit conditions cover not only emissions to air and water, but also consider issues such as emissions to land, waste management, energy efficiency, environmental management systems and prevention of accidents (Article 15(1,2))



Issue 1: Insufficient implementation of Best Available Techniques (BAT)

BREFs contain emission levels associated with the use of BAT (BAT-AELs)

Permits must contain emission limits set by the competent authority that do not exceed BAT-AELs (Article 16(2))

Derogation from these limits is allowed in specific cases as long as it is justified (Article 16(3))

Table 5.2: Operational emission level ranges associated with BAT

Substance(s)	Non-continuous samples	¼ hour average	24 hour average
Total dust		1 – 20 (see split view 2)	1 – 5
Hydrogen chloride (HCl)		1 – 50	1 – 8
Hydrogen fluoride (HF)		<2 (see split view 2)	<1
Sulphur dioxide (SO ₂)		1 – 150 (see split view 2)	1 – 40 (see split view 2)
Nitrogen monoxide (NO) and nitrogen dioxide (NO ₂), expressed as nitrogen dioxide for installations using SCR		40 – 300 (see split view 2)	40 – 100 (see split view 2)

Table 2.2.2: Emission limits to air and monitoring during normal operation

Emission point reference	Parameter	Limit (including Reference Period) ^{Note 1}	Monitoring frequency	Monitoring method
A1, A2	Particulate matter	30 mg/m ³ ½-hr average	Continuous measurement ^{Note 2}	BS EN 13284-2 ^{Note 3}
A1, A2	Particulate matter	10 mg/m ³ daily average	Continuous measurement ^{Note 2}	BS EN 13284-2 ^{Note 3}
A1, A2	Particulate matter	20 mg/m ³ periodic over minimum 1-hour period	Bi-annual	BS EN 13284-1

Issue 1: Insufficient implementation of Best Available Techniques (BAT)

■ BREFs contain BAT AELs that generally cover

- a range of values
- Units of measurement (e.g. mg/m³, g/t)
- Averaging periods (e.g. daily, yearly)
- Reference conditions (e.g. 3% oxygen in waste gas)

■ Permits must contain emission limits that do not exceed the BAT-AELs (under the conditions set in the BREF)

■ Competent authorities to decide on

- monitoring regime for ELVs (frequency of measurement, standards to be used)
- compliance regime for ELVs (enforcement rules: number of exceedances; how to address measurement uncertainties)
- possible additional ELVs with different averaging period (e.g. yearly) or units (e.g. specific instead of concentrations) than described in the BREFs
- abnormal periods of operation (e.g. during start up and shut down)
- possible additional ELVs for other pollutants than described in the BREFs

BAT AEL
10 - 50 mg/m³; daily



ELV
< 50 mg/m³; daily

Issue 1: Insufficient implementation of Best Available Techniques (BAT): sectoral chapters

- **LCP**: tightening of minimum ELVS from 2016 on
 - Aligned with current BAT (upper end of the range)
 - Significant contribution to the objectives of the TSAP
 - Net benefits of €7-28 billion per year
- **WI**: limited number of changes in Ch. IV and Annex VI
 - **see next slides**
- **SE**: no changes
- **TiO₂**: alignment with BAT (and major simplification)

Chapter IV: waste incineration plants and waste co-incineration plants

■ very few substantive changes:

- specific definition of “hazardous waste” deleted
- Comitology for continuous monitoring of PCDD/F and HM
- Review clause removed
- Implementation reporting: streamlined and moved to Ch. VII

■ adaptations and minor changes

- mostly rewording to improve legal drafting
- some definitions moved to Chapter I (waste, waste incineration plant, waste co-incineration plant, ...)

Annex VI: waste incineration plants and waste co-incineration plants

■ substantive changes:

- NO_x ELV for existing cement kilns co-incinerating waste: 500 mg/Nm³
- new Cproc for combustion plants co-incinerating waste, in line with new ELVs for LCP from Annex V (BAT based)
- emission monitoring: additional options for exemptions are possible under certain conditions
 - HCl, HF, SO₂: no measurements
 - NO_x: no continuous measurements for plants < 6 t/h
 - HM and PCDD/F: less than 2/year or no measurements

■ adaptations and minor changes

- mostly rewording to improve legal drafting

Issue 2: Limitations with regard to compliance, enforcement and environmental improvements

Introduction of minimum provisions for:

i) Inspections

Article 25

Inspections

1. Member States shall set up a system of inspections of installations.

That system shall include on site inspections.

- Inspection plans and programmes for IPPC installations
- At least one inspection **every 12 months** unless the programmes are based on a **systematic appraisal of the environmental risks** of the installations concerned
- Comitology for setting of minimum criteria



Issue 2: Limitations with regard to compliance, enforcement and environmental improvements

ii) review of permit conditions

3. Where the Commission adopts a new or updated BAT reference document, Member States shall, within four years of publication, ensure that the competent authority, where necessary, reconsiders and updates the permit conditions for the installations concerned.

- The new provisions for permit reviews recognise that BAT is a **dynamic** concept and changes with time
- Permits must consequently be **reconsidered within 4 years of the publishing of a new BREF** in order to ensure that the installation concerned still operates according to BAT
- In some cases permits will have to be **updated** to reflect changes to BAT described in the most recent BREF

Issue 2: Limitations with regard to compliance, enforcement and environmental improvements

iii) reporting by operators

Article 8

Reporting on compliance

Member States shall take the necessary measures to ensure the following:

- (1) that the operator provides the competent authority with a report on compliance with the permit conditions at least every twelve months;

Article 24

Reporting on compliance

The report on compliance referred to in point (1) of Article 8 shall include a comparison between the operation of the installation, including the level of emissions, and the best available techniques as described in the BAT reference documents.

- **New provisions to ensure that permit conditions are met and that operators remain familiar with both their permit and with changes in BAT**

Issue 3: Unnecessary administrative burdens

- The Commission has identified reductions in administrative burden at **EU level** through the introduction of:
 - ➔ Reduced reporting requirements for MS and operators
 - ➔ Simplified use of general binding rules
 - ➔ Unified / Single permits for installations subject to the proposed Directive
- These actions at an EU level should reduce administrative burden by €31 million per year
- However, the main possibilities for reduction of administrative burden lie at **Member States** level: action could result in a further €150-300 million saving per year

Issue 4: Insufficient scope & unclear provisions that threaten the Commission's Thematic Strategy objectives

- **Environmental improvements through the introduction of **new activities** to the scope of IPPC**
 - ➔ Smaller combustion activities of 20-50MW capacity
 - ➔ Wood based panels, wood preservation activities
 - ➔ Additional waste management activities
 - pre-treatment for co-incineration, treatment of slags/ashes, treatment of scrap metal
- **Clarification of IPPC scope for existing activities, in particular for waste (incl. incineration), food/drink and farming activities**
- **New provisions concerning **protection of soil and groundwater****
 - ➔ **Monitoring** (at least every 7 years)
 - ➔ **Baseline report** on contamination of site with **dangerous substances**
 - ➔ Upon **definitive cessation** of activities: **remediate** site ➔ baseline

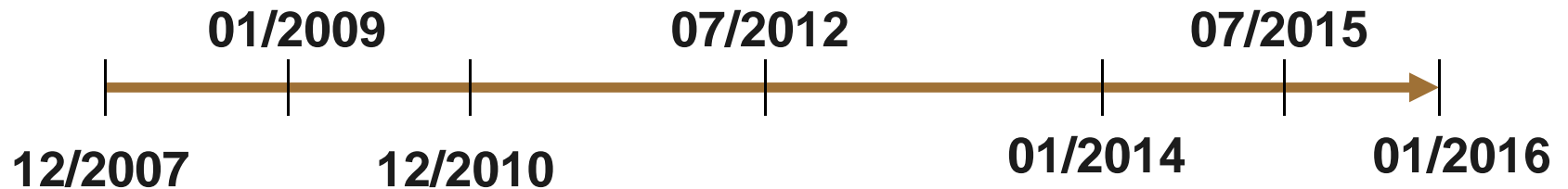
Issue 5: Constraints on the use of more flexible instruments such as NO_x and SO₂ emission trading systems

- The Commission has not included provisions within the legal text concerning NO_x and SO₂ emissions trading
- Studies have shown that such a tool could be **cost-effective** and could provide significant savings in achieving environmental improvements.
However, **clear EU-wide rules are necessary.**
- The Commission will continue to undertake research in this area

Expected benefits of the Commission's legislative proposal

- Significant **environmental and health benefits** through the application of BAT, better enforcement and inspection and the extension of the scope of the legislation
- For the **LCPs** alone, net environmental benefits from emission reduction of €7-28 billion per year including the annual reduction of premature deaths by 13 000
- Net reduction of **administrative burden** of €105-255 million per year
- A more unified application of BAT will also **reduce distortion of competition**
- The impact assessment has shown that the proposal will have **no long term impacts on competitiveness**

Indicative timeline for the legal proposal



Depending on the co-decision procedure the Commission expects the following to take place...

The Commission adopts its proposal for a Directive on industrial emissions as well as issuing its Communication 'Towards an improved policy on industrial emissions'

First reading in the European Parliament and political agreement in Council

Completion of the co-decision process and publication of the Directive within the Official Journal

MS fully transpose the new Directive (18 months after entry into force).

The Directive applies to all new installations from this date onwards

All existing installations previously subject to IPPC, WID, SED and TiO₂ Directives must meet the requirements of the new Directive.

Large Combustion Plants do not yet need to meet the new ELVs prescribed within the Directive.

Existing installations performing the newly prescribed activities (e.g. combustion plants 20-50 MW, wood based panel production, wood preservation) must meet the requirements of the new Directive.

Large Combustion Plants must meet the requirements set out in Chapter 2 of the new Directive, as well as the Emission Limit Values set out in Annex V

For more information...

- **DG ENV industrial emissions website**
<http://www.ec.europa.eu/environment/ippc/index.htm>
- **CIRCA website on the IPPC review (study reports)**
http://circa.europa.eu/Public/irc/env/ippc_rev/library