



26/08/2015

# **20 jaar BBT/EMIS een terugblik en vooruitblik**

Diane Huybrechts en Karel Styns

# 1995



- » Beslissing Vlaamse Regering
  - » Oprichting kenniscentrum Beste Beschikbare Technieken en bijhorend Energie- en MilieuInformatieSysteem (BBT/EMIS)
- » Taken BBT/EMIS



# Evoluties 1995-2015 en verder



## Vlaams BBT-werk

- Scope
- Aanpak



## Informatieverspreiding

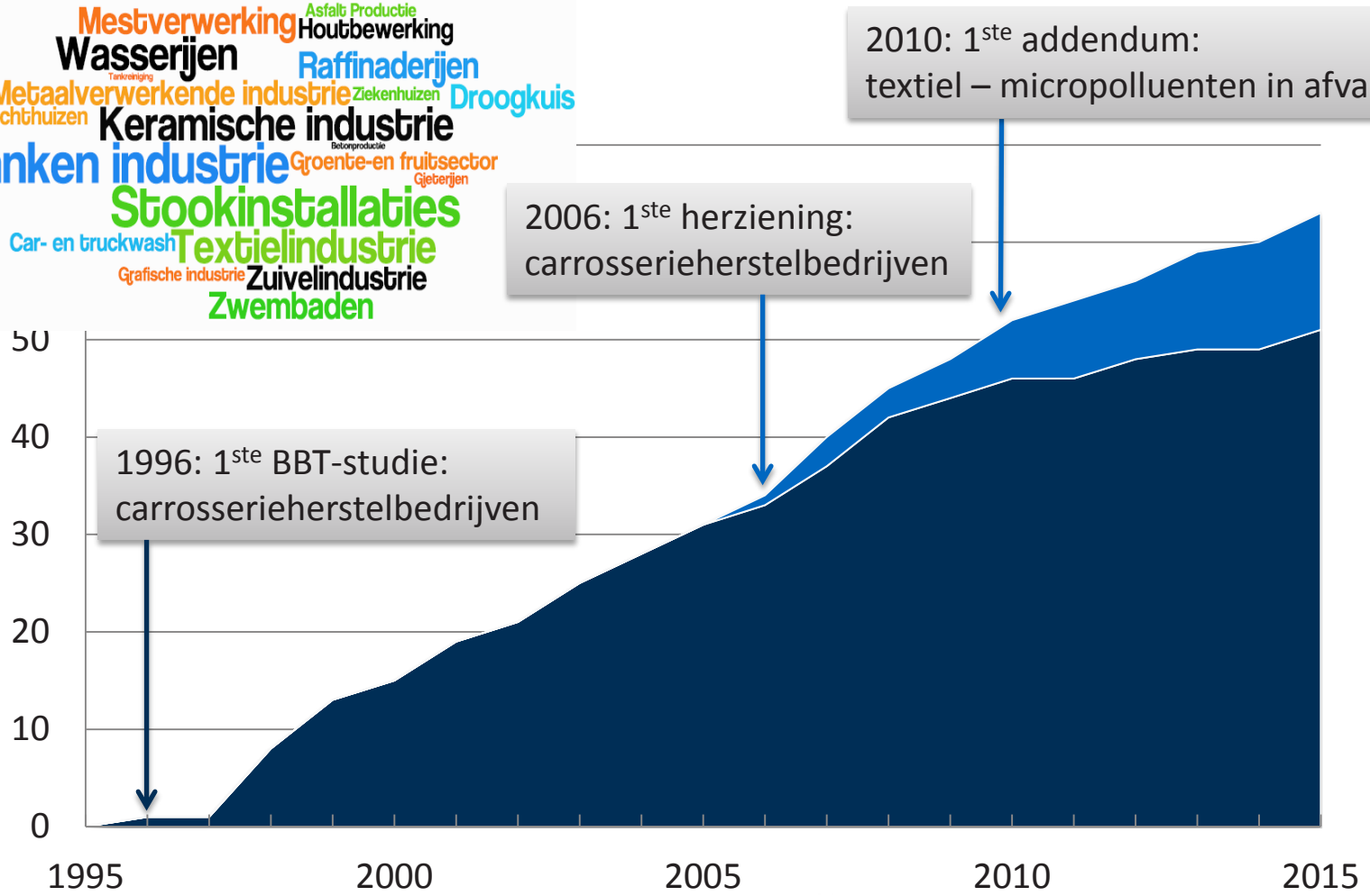
- EMIS-website
- Navigator



## Europees BBT-werk

- van IPPC naar IED wereld

# Gepubliceerde studies



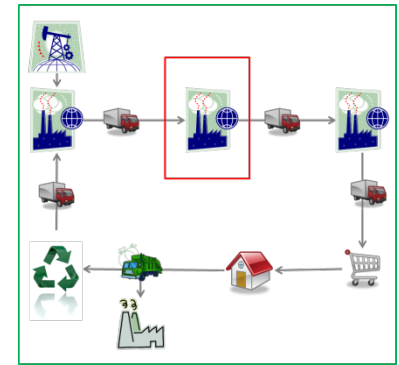
# Aanpak Vlaamse BBT-studies



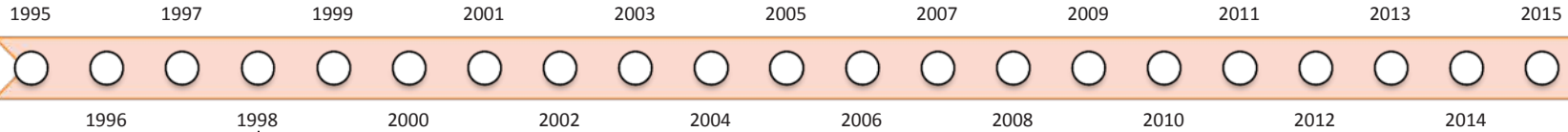
Begeleidingscomités



Overlegmodel



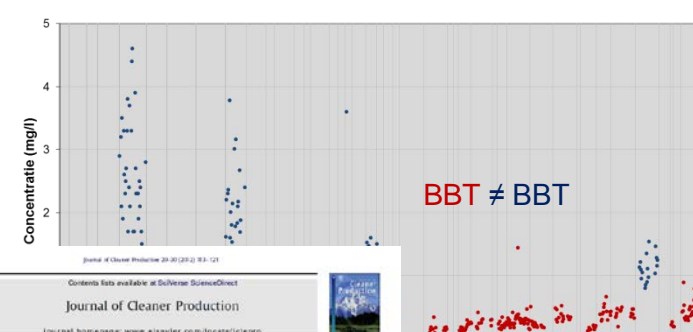
Sector in de keten



BBT-evaluatietabel

BBT geassocieerde emissieniveaus

Techniek	Technisch haalbaar?	Positief globaal milieuvoordeel?	Economisch haalbaar?	BBT-conclusie
T1	+	+	+	BBT
T2	+	+	-	geen BBT
T3	+	0/-		
T4	-			



Methodology for selection of best available techniques (BAT) at the sector level  
 Roger Dijkmans  
 Journal of Cleaner Production 18 (2010) 11-21

Methodology for determining emission levels associated with the best available techniques for industrial waste water  
 Caroline Polders\*, Liesbet Van den Abeele, An Derden, Diane Huybrechts  
 Journal of Cleaner Production 20 (2012) 163-174

# Toekomst Vlaamse BBT-studies ?





[www.emis.vito.be](http://www.emis.vito.be)  
[navigator.emis.vito.be](http://navigator.emis.vito.be)  
[www.milieuinfo.be/wegwijzer](http://www.milieuinfo.be/wegwijzer)  
[www.felnet.be](http://www.felnet.be)

**emis@vito.be**

 @wwwemisvitobe

EMIS

Energie cijfers

Adresboek

Milieutechnologie

Wetgeving



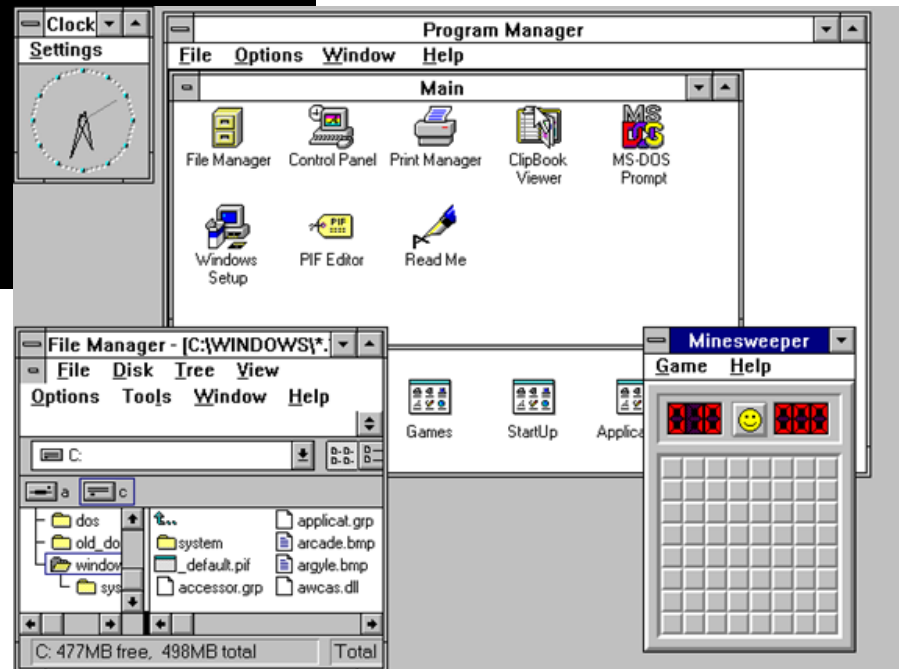
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WINA20     386          9.349 31.05.94    6:22
CONFIG     OLD          147 12.06.01    17:44
AUTOEXEC   OLD          230 22.06.01    21:05
NETWIN     BAT           42 01.07.01    15:45
TREEINFO   NCD          539 23.06.01    13:02
CONFIG     SYS          208 30.06.01    15:45
AUTOEXEC   BAT          292 05.08.01    22:41
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37 Datei(en)          929.889 Byte
                    50.778.112 Byte frei

C:\>ver

MS-DOS Version 6.22

C:\>_
    
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C 2

THE GAZETTE, MONTREAL, MONDAY, OCTOBER 30, 1995

COMPUTERS

# Here's the Fall '95 version of a basic computer

PAUL DE GROOT  
EDMONTON JOURNAL

megabytes, and a one-gigabyte ■ Memory

drive from IBM cost more than We seem to have convinced

400-megabyte hard drive.

■ Monitors

We're edging into 15-inch monitors as standard, compared with the 14-inchers of the past, but the extra inch adds little. If you really need more monitor (desktop publishers and heavy-duty spreadsheet users for example), go for a 17-inch screen and pay the \$400 premium.

■ Video cards

We're into 24-bit accelerated video cards these days, and while these cards look great in benchmark tests, faster processors and faster circuitry make accelerated video less critical.

The 24-bit feature affects color depth - that is, the number of colors the computer can display. The standard eight-bit color can display up to 17 million colors - nice if you've got 24-bit images to look at, but few programs require such depth.

You needn't go to 24-bit color to improve on the standard 256-color display: many inexpensive video cards have 32,000 or 64,000 color modes which are already a substantial improvement.

To confuse things, some cards

will refer to 32-bit, 64-bit and even 128-bit features. This doesn't refer to color depth but to the width of the data path between components on the card.

■ Sound cards

This year we're seeing more cards with wavetable synthesis, which provides more realistic representation of musical instruments. But there's not much software which requires this: the sound of a plasma blaster in DOOM is not a musical instrument. Unless you're serious about music, you might want to pass on wavetable sound for now.

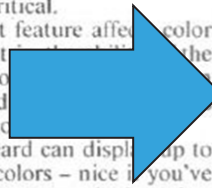
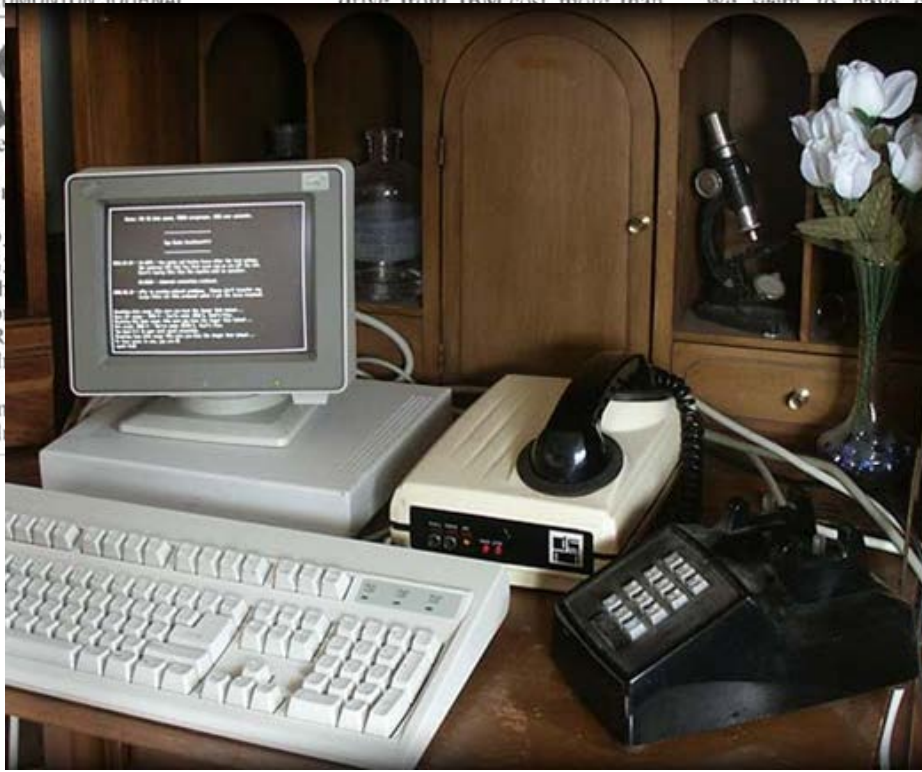
■ Modems

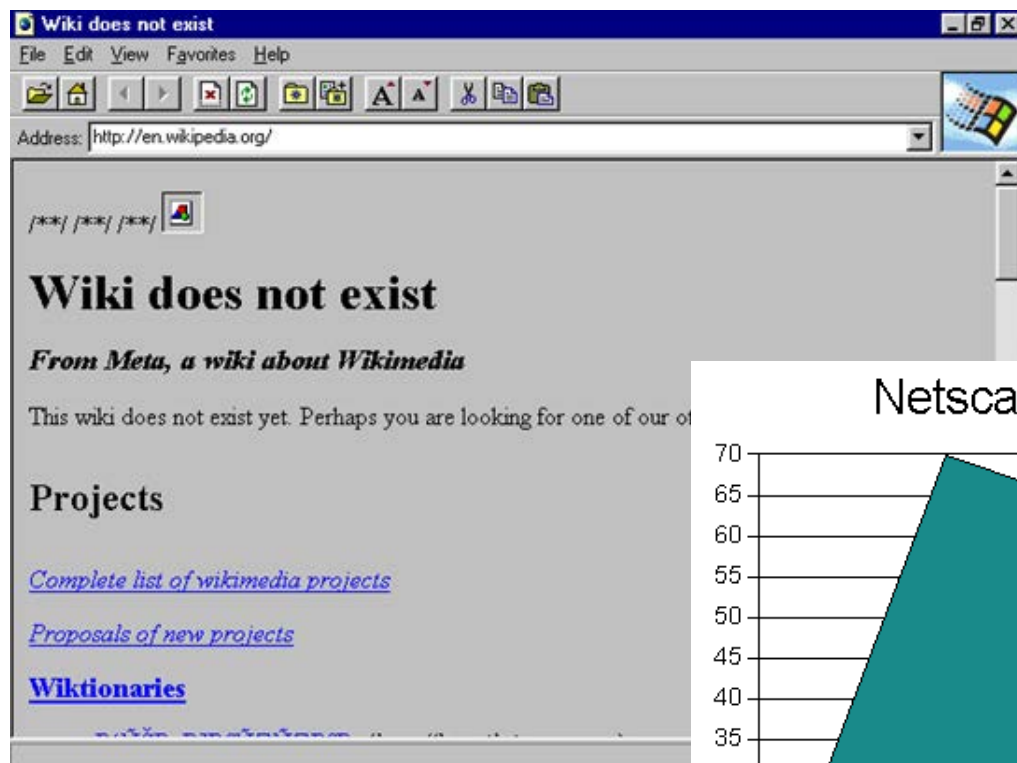
The 14.4K modems are on the way out; 28.8 is in. I'd tend toward 28.8 for about an extra \$100, but a 14.4 is pretty quick and will capably handle E-mail.

■ Faster CD-ROMS

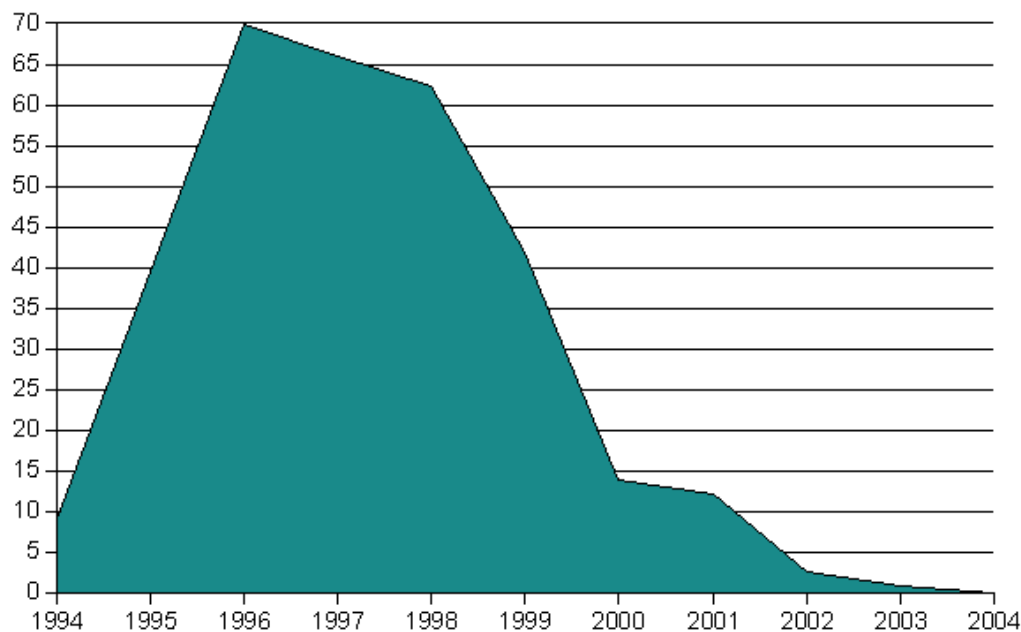
Last year, double-speed drives were mainstream and quad-speed drives were in the future. Well, the future is here.

I'd like to say you don't need to spend extra here, but I think software makers are already assuming people have quad-speed drives. Go for a quad if you can.





Netscape Navigator usage share



# Google!

B E T A

Search the web using Google!

Google Search

I'm feeling lucky

[Help!](#)

[About Google!](#)

[Company Info](#)

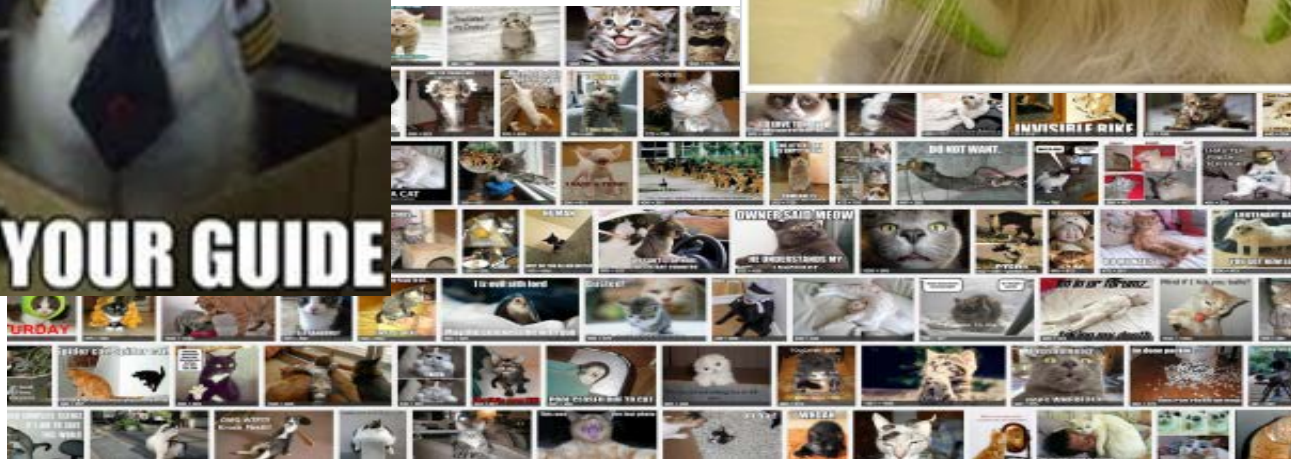
[Google! Logos](#)

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# Internet anno 2015



> 70 Miljoen!



START BBT/EMIS

1. Vlaamse Activiteiten		2. Vlaamse Uitgaven											
Code	Naam	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1.1.1	Actuele wetgeving	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000
1.1.2	Adresboek	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000
1.1.3	Forum	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000
1.1.4	Cijfers	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000
1.1.5	Zoek in EMIS naar:	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000	1.000.000

20 JAAR BBT/EMIS



START NAVIGATOR

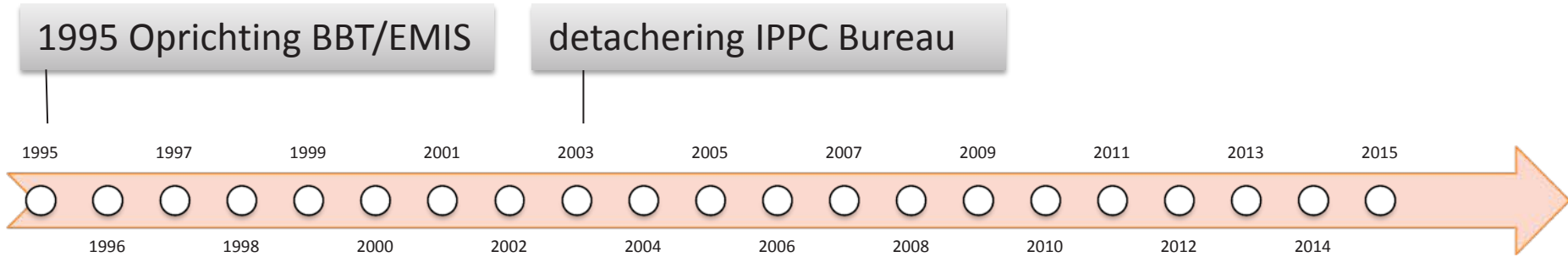
START IBBT







# Europees BBT-werk



1995 Oprichting BBT/EMIS

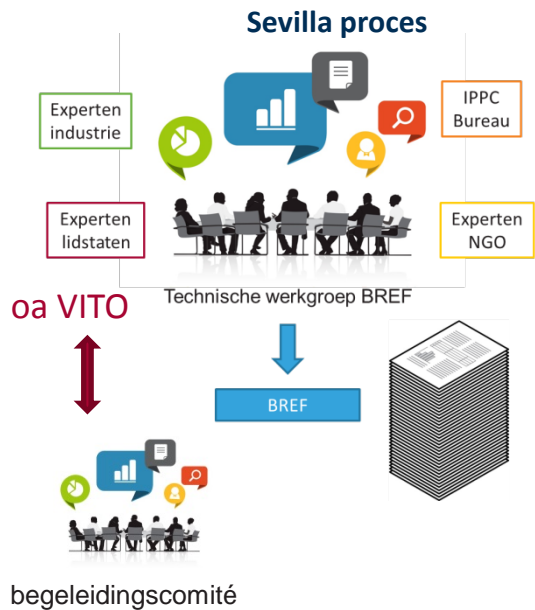
detachering IPPC Bureau

1996 IPPC Richtlijn

2010 IED Richtlijn

2014 VLAREM III

2012 Guidance document



# IED vs IPPC wereld

## IPPC

Middelgrote TWG

Grote druk en verwachtingen

Ad hoc proces

Hanteerbare hoeveelheid data

Expert judgement

## IED

Grote tot zeer grote TWG

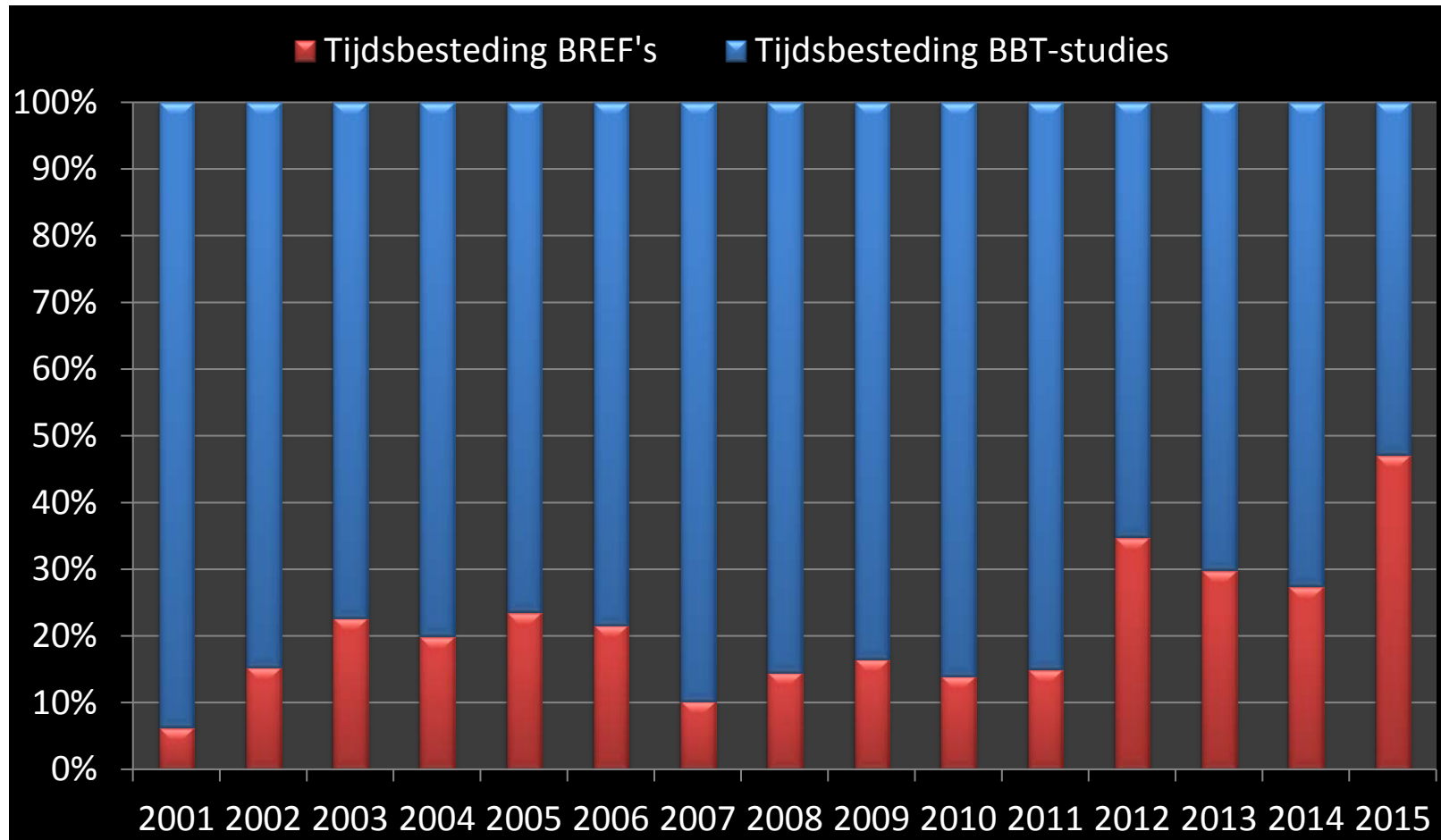
Zeer grote druk en verwachtingen

Systematisch proces

Questionnaires – veel data

Evidence + expert judgement

# IED vs IPPC wereld



# Toekomst Europees werk ?

blijven waken dat info aangeleverd vanuit Vlaanderen/België correct wordt meegenomen in BBT-conclusies

focussen op specifieke punten

- belang voor Vlaamse/Belgische industrie
- aandachtspunten vanuit beleid

internationale workshop 2016

- Implementatie IED
- Integratie ketenaspecten

**Bedankt voor uw aandacht !**