

Reporting on air quality across Europe and Citeair

European Environment Agency

www.eea.eu.int

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6th Environmental action programme

Objective

- Attain 'levels of air quality that do not give rise to significant negative impacts on, and risks to human health and the environment'.

Status (some health impacts)

- Deaths in 2000 due to particulates - 348 000
- Ozone is thought to hasten the deaths of up to 20 000 people in the EU each year
- Ozone is responsible for people taking medication for 30 million person-days a year.



Legal framework of air quality reporting

- ☀ Air quality framework directive 96/62/EC
- ☀ "Daughter" directives to 96/62/EC (1999/30/EC, 2000/69/EC, 2002/3/EC)
- ☀ 97/101/EC (Council Decision establishing a reciprocal exchange of information and data from networks)
- ☀ 2001/839/EC (Commission Decision ~ questionnaire (...) for annual reporting on ambient air quality assessment)
- ☀ 2004/279/EC (Commission Decision concerning guidance for implementation of Directive 2002/3/EC)
- ☀ Guidance on the annexes to Decision 97/101/EC on exchange of information as revised by Decision 2001/752/EC



What are some key questions

- ☀ How many people are suffering from poor air quality in Europe?
- ☀ Where?
- ☀ When?
- ☀ What are the effects?
- ☀ Where are the sources?
- ☀ Where are the impact?



How are AQ data in Airbase used by EEA?

- ☀ Indicator reports
 - ☀ The European Environment – State and outlook 2005
 - ☀ Environmental Signals (2004)
 - ☀ Air Quality in Europe 1990-2000
 - ☀ Structural indicators
- ☀ Summer ozone reports
- ☀ Street emission ceilings
- ☀ Guidance documents – EU policy support





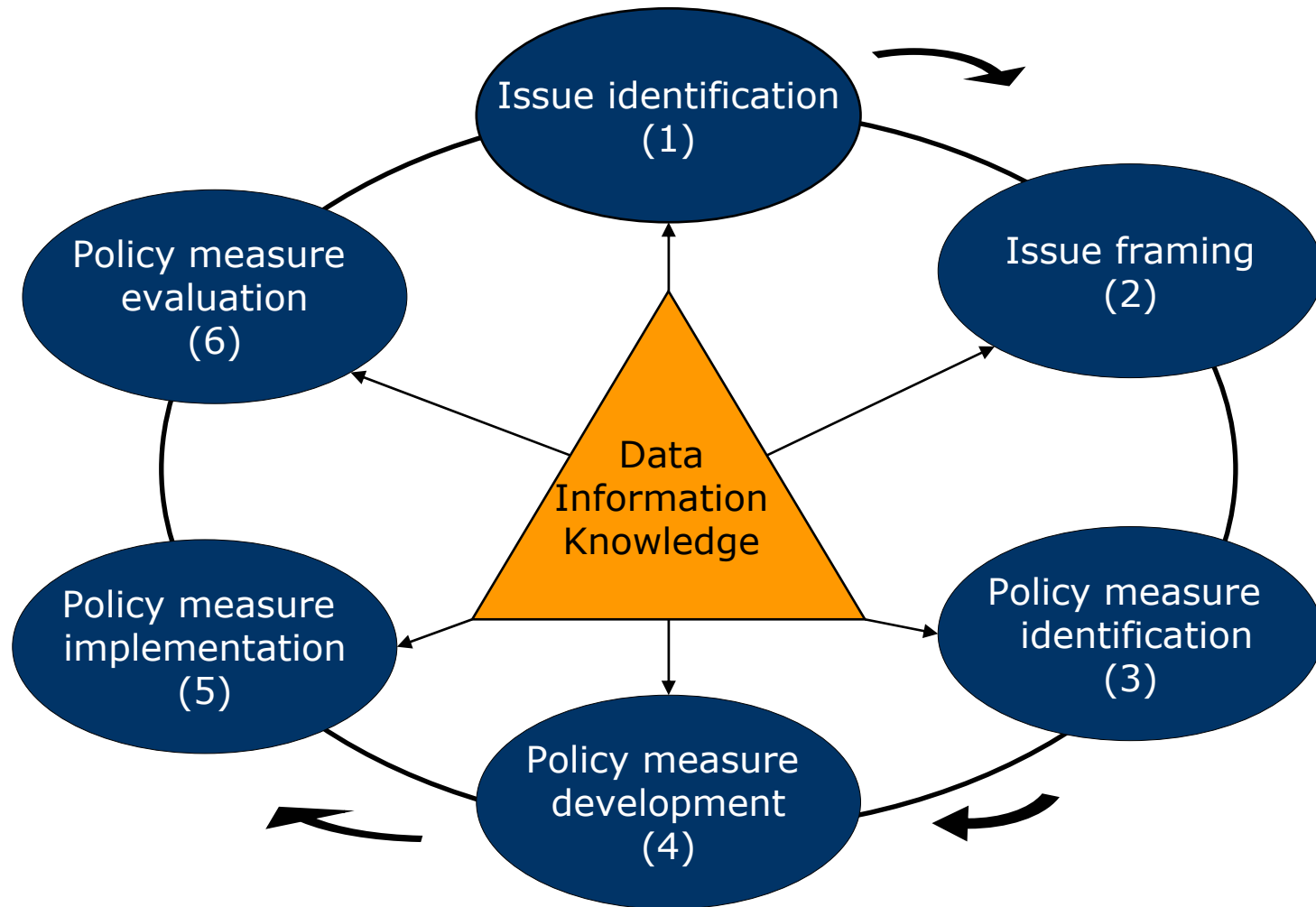
We are healthier, but exposure to pollutants remain

- ☀ Europe has been successful in reducing smogs and acid rain
- ☀ Even so, urban air pollution still causes health problems in many cities (particulates & ozone)
- ☀ Cleaner transport technology and better urban planning can contribute to improvements
- ☀ The use of market based instruments such as congestion charging that change behaviour can also be effective

(Source: The European Environment – State and outlook 2005
www.eea.eu.int)

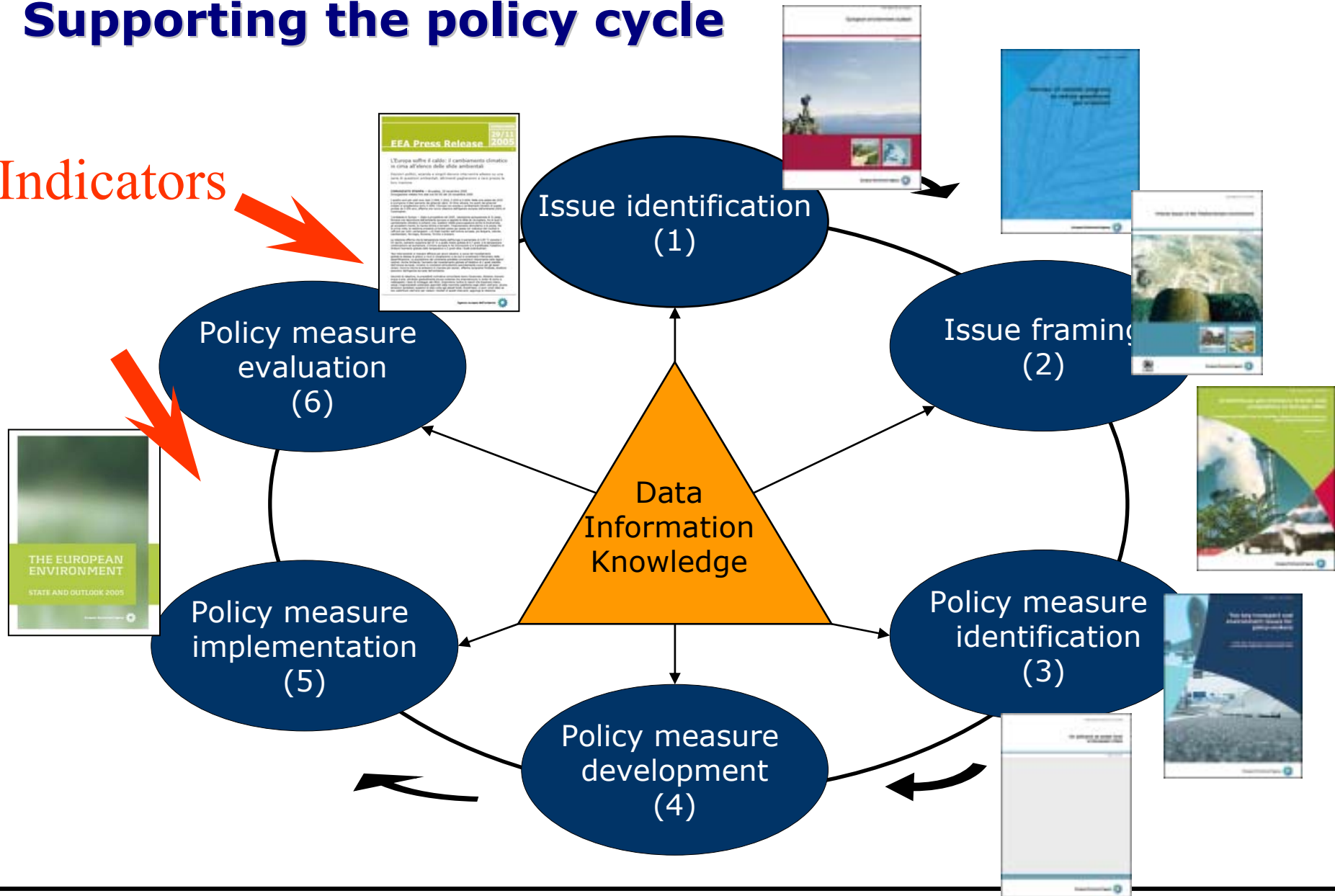


Supporting the policy cycle



Supporting the policy cycle

Indicators





Successes & challenges

Successes:

- ☀ Europe has been successful in reducing smogs and acid rain
- ☀ Most success achieved for easily managed point sources of pollution





Successes & challenges

Challenges:

- ☀ Urban air pollution still causes health problems in many cities (particulates & ozone)
- ☀ Diffuse sources of pollution from economic sectors now the major challenge
- ☀ Land use, consumption and trade patterns most threaten environmental progress

(Source: The European Environment – State and outlook 2005
www.eea.eu.int)



Information is key

1. Correct presentation of air quality status and forecasts
2. People use information and gain knowledge
3. Health impacts reduced (choices & policy)
4. Pollution episodes reduced



Public information from air quality legislation

- ☀ adequate information on air quality should be made available to public
- ☀ Up-to-date information on ambient concentrations of **sulphur dioxide, nitrogen oxides, particulate matter, lead, benzene and ozone** shall be available to the public and appropriate organisations.
- ☀ Exchange of information about ozone episodes and exceedances of limit values.



Some user scenarios

- ☀ What is the picture across Europe?
- ☀ How do two regions compare?
- ☀ How is AQ in a region with reference to EU / WHO limit values?
- ☀ What is happening where I am going on holiday?
- ☀ Which parts of Europe are affected by episodes now?
- ☀ What pollution will be exported / imported to a region?
- ☀ Tell me when something is happening in ---
→ **Where can I get more info**



Current Ozone Conditions > [Show forecast](#)

Place name/Post code:

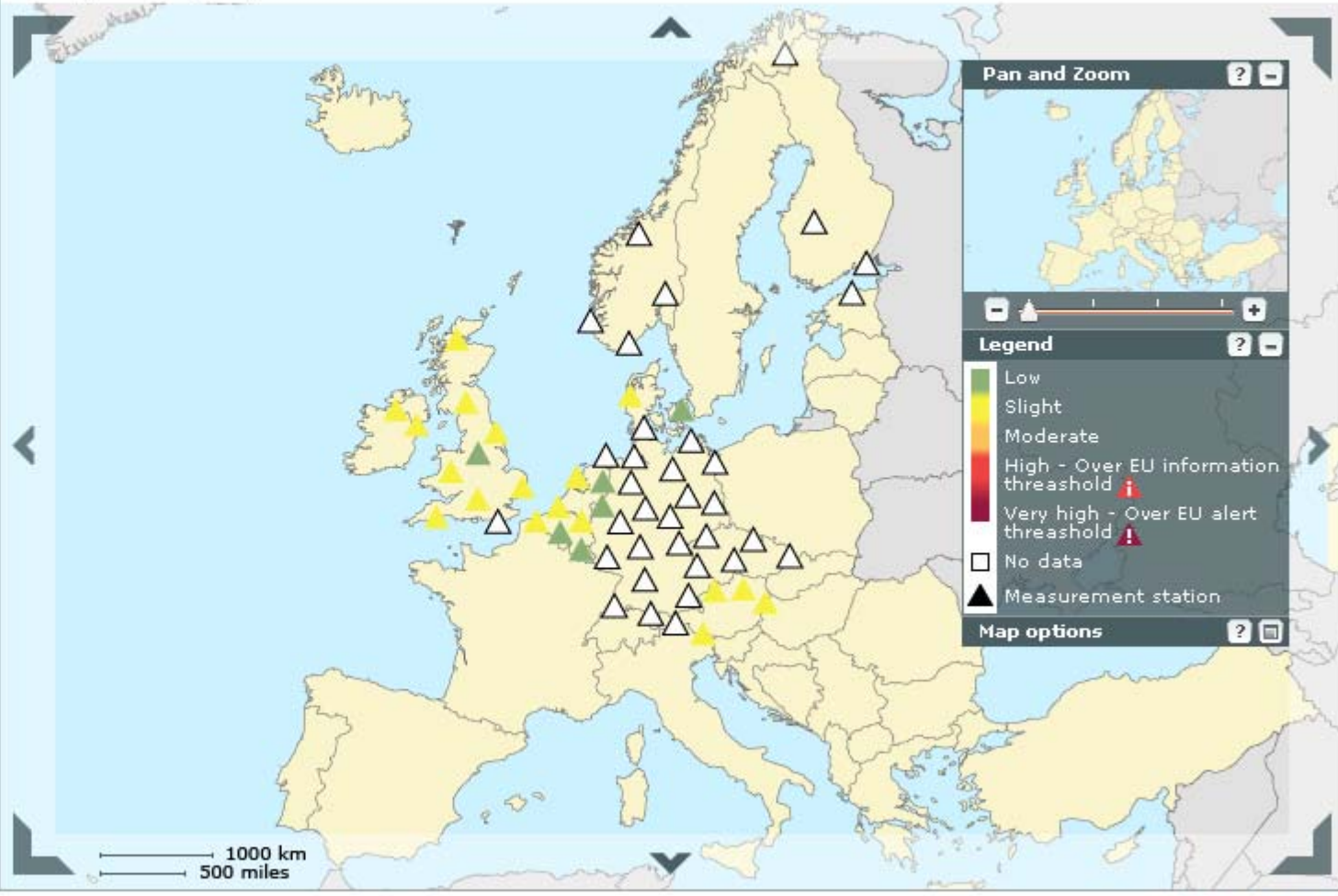
 ?

Country:

 ?

Find

Monday, February 13th, 2006 at 12:00 CET



[Unvalidated data](#)

Current Ozone Conditions > [Show forecast](#)

Place name/Post code:

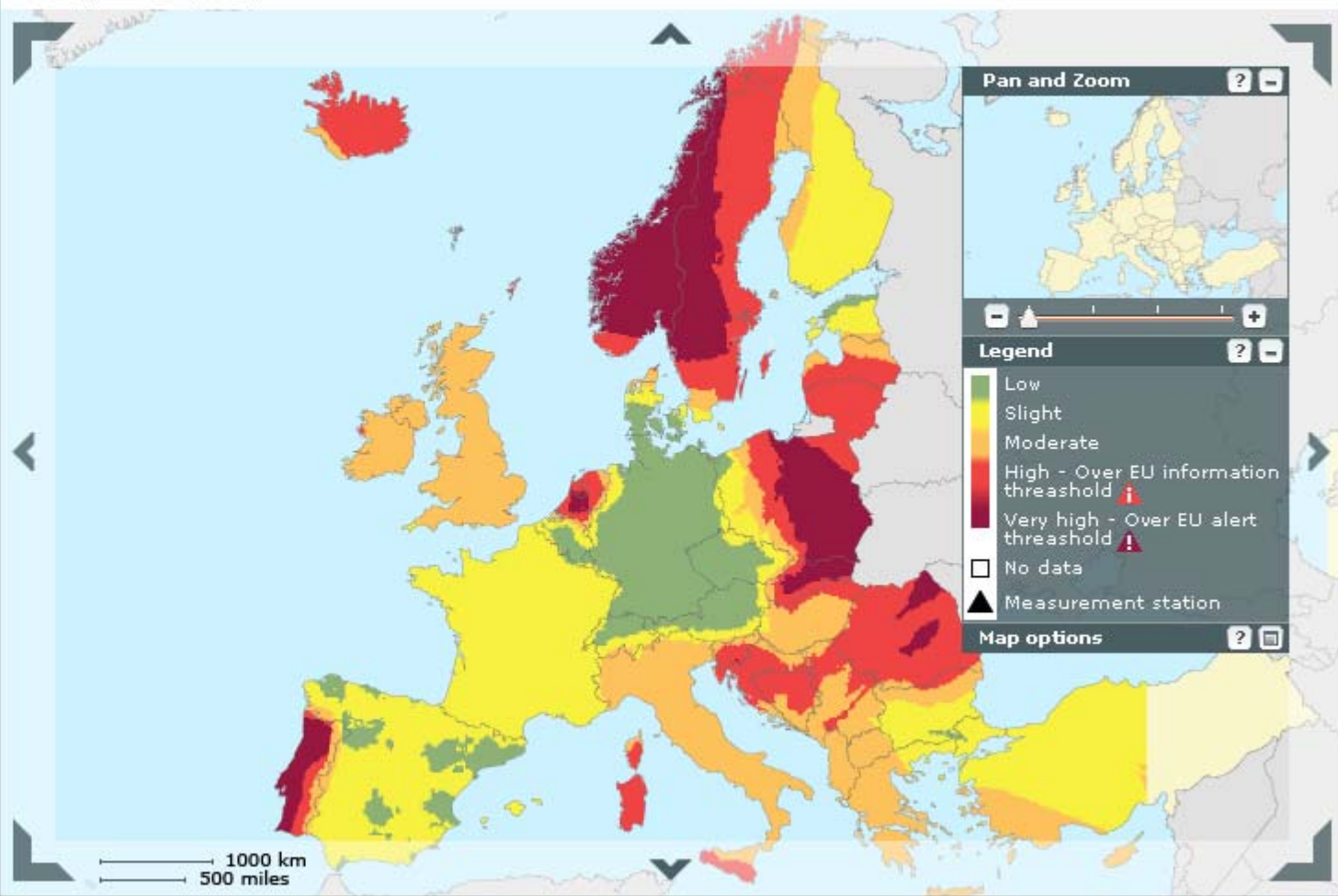
 ?

Country:

 ?

Find

Monday, February 13th, 2006 at 12:00 CET



Unvalidated data

Compare

Place name/Post code:
 ?

Country:
 ?

To
Place name/Post code:
 ?

Country:
 ?

Compare

Comparison: European Overview

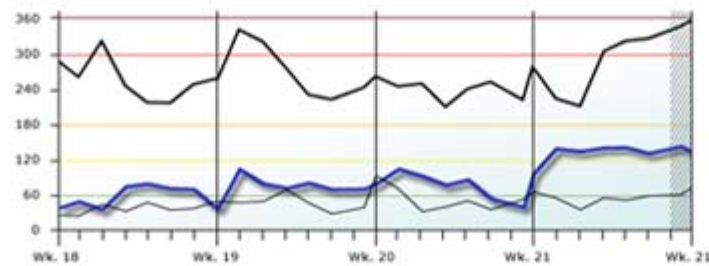
Compare Ozone Conditions Across Europe

Ozone Today, Monday, Feb 13, 2006

Over EU information threshold
 Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Location	$\mu\text{g}/\text{m}^3$
1. Name, country	###
2. Name, country	###
3. Name, country	###
4. Name, country	###
5. Name, country	###
6. Name, country	###
7. Name, country	###
8. Name, country	###
9. Name, country	###
10. Name, country	###

Maximum: Name, country
 Current conditions in name, country are very unhealthy (click graph to enlarge)



Ozone This Week

Over EU information threshold
 Lorem ipsum dolor sit amet, consectetur adipiscing elit.

Location	Hrs > 180 $\mu\text{g}/\text{m}^3$
1. Name, country	###
2. Name, country	###
3. <u>Name, country</u>	###
4. Name, country	###
5. Name, country	###
6. Name, country	###
7. Name, country	###
8. Name, country	###
9. Name, country	###
10. Name, country	###

Highest Ozone Values the Last 7 Days
 Lorem ipsum dolor sit amet. (Click name to see on map.)

Location	Hrs > 180 $\mu\text{g}/\text{m}^3$
1. Name, country	###
2. Name, country	###
3. Name, country	###
4. Name, country	###
5. Name, country	###
6. Name, country	###
7. Name, country	###
8. Name, country	###
9. Name, country	###
10. Name, country	###

Unvalidated data

Citeair Common Operational Website (COW)

The screenshot displays the Citeair Common Operational Website (COW) interface. At the top left is the "AIR QUALITY IN EUROPE" logo, and at the top right is the European Union flag. Below these is a banner image showing various European cityscapes. A navigation bar contains links: "Air Quality NOW | About Air Quality | JOIN US! | About This Website |".

On the left side, there is a search bar with a magnifying glass icon and the text "Search". Below it is a "JOIN US!" link.

The main content area features a text block: "In the framework of implementing reduction measures to improve air quality and fulfil the European directives, comparable information on air quality at the European scale becomes an increasing issue for the local authorities but also for the media and the general public."

Below the text is a "Traffic Air Quality Index" section. It includes a header with a car icon and a house icon, the text "Traffic Air Quality Index", and "last update: 2006-03-08 19:00:00". Below this is a color-coded scale from "Very Bad" (red) to "Very Good" (green), with intermediate colors (orange, yellow, light green). A minus sign and a plus sign are also present.

The central part of the page is a map of Europe with a yellow grid. A dashed blue box highlights a specific region in Northern Europe. Several cities are labeled on the map: Leicester, Berlin, Rotterdam, Bruxelles, Paris, Prague, and Roma.

At the bottom right of the map area are the "citeair" logo and the "North East South West INTERREG IIIC" logo.

The footer contains the copyright notice "© COPYRIGHT CITEAIR 2005" on the left and the links "PRIVACY | SITE MAP | CREDITS" on the right.



Citeair Common Operational Website (COW)



[Air Quality NOW](#) | [About Air Quality](#) | [JOIN US!](#) | [About This Website](#) |

Cities Air Quality

Index Definition

Cities Air Quality

The table above describes the current state of air quality in European cities:

- The general background conditions of the city. This is the outdoor air quality experienced by the average citizen.
- The roadside air quality. In most European cities, busy streets are the places with the poorest air quality. This affects the people living in these kind of streets but also traffic participants though they are exposed but for a shorter period of time.

The state of air quality of the cities is presented as an [air quality index](#). The hourly index is updated every hour and allows you to see how air quality changes and evolves during the day. The daily index presents yesterday's overall air quality.

Detailed information on the cities indices are available when clicking on their name.

City Name	Roadside Index		Background Index	
	Now	Yesterday	Now	Yesterday
Berlin	57	48	-	-
Bruxelles	-	52	-	38
Leicester	-	46	23	36
Paris	-	57	-	43
Prague	-	50	-	52
Roma	-	56	-	37
Rotterdam	40	67	28	50

Legend

Air Quality	Very Good	Good	Medium	Bad	Very Bad
Index value	0 ~ 25	25 ~ 50	50 ~ 75	75 ~ 100	> 100



Thank you.