

# AIR POLLUTION IN KRAKOW

Air pollution in Krakow poses a significant danger to human health and life. Krakow's poisoned air includes amongst other things: particulate matter, benzo(a)pyrene and nitrogen dioxide.

The city has been rated amongst the most polluted in the world in a World Health Organisation (WHO) study. In the report, Krakow was ranked 8th among 575 cities for levels of PM 2.5 and 145th among 1100 cities for levels of PM 10. Hazardous air quality is a common problem particularly during the colder months when many residents use solid fuels (mostly coal) for household heating. Burning these fuels in heating appliances releases many pollutants into the air. Furthermore, sometimes users of these stoves burn garbage, despite the fact that doing so is forbidden. Each year, pollution levels begin creeping up in autumn, and readings for PM 10 are regularly surging above 100  $\mu\text{g}/\text{m}^3$ . For example, in December 2012 (the first month of our activity), Krakow experienced only three days of "clean air" i.e. with the 24-hour mean PM 10 concentration below 50  $\mu\text{g}/\text{m}^3$ . And on December 9 air pollution monitoring devices recorded levels of PM 10 as high as 269  $\mu\text{g}/\text{m}^3$ , 335  $\mu\text{g}/\text{m}^3$  and 402  $\mu\text{g}/\text{m}^3$ .

Annual mean concentration of carcinogenic benzo(a)pyrene. 95% of benzo(a)pyrene pollution originates from combustion of coal and other solid fuels in house stoves. Krakovians inhale with the air the amounts of benzo(a)pyrene corresponding to smoking 2.5 thousand cigarettes a year.

Value recognised in EU law as safe 1ng/m<sup>3</sup>

KRAKOW



10,2ng/m<sup>3</sup>

BERLIN



0,7 ng/m<sup>3</sup>

VIENNA



0,6 ng/m<sup>3</sup>

ROME



0,4 ng/m<sup>3</sup>

PARIS



0,3 ng/m<sup>3</sup>

DUBLIN



0,3 ng/m<sup>3</sup>

BARCELONA



0,13 ng/m<sup>3</sup>

LONDON



0,081 ng/m<sup>3</sup>

# TIMELINE OF EVENTS

## 2012

### December, 7

Creation of Krakow Smog Alert Facebook page.

### December, 19

Press conference, presentation of the initiative and petition with major demands: "We the undersigned, are deeply concerned about the dramatic air quality in Krakow. During the heating season air pollution regularly and frequently exceeds the acceptable levels and threatens our health and life. (...) Therefore, we urge the local authorities to introduce the ban on the use of solid fuels for household heating in home burning appliances in Krakow immediately, taking into account the transitional period of several years to adjust heating systems."

Throughout the month the action became increasingly popular and was supported by doctors and celebrities including Andrzej Wajda, the recipient of an honorary Oscar.

### December, 28

Smog in Krakow designated the "disgrace of the year" by listeners of the local radio (Radio Kraków).

### Podnoszą Krakowski Alarm Smogowy i piszą petycję do władz

Dominika Wantuch 15.12.2012, aktualizacja: 14.12.2012 19:46

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Czy w XXI wieku Kraków nie powinien znaleźć jakiegoś rozwiązania, które poprawioby jakość powietrza w mieście? - pytają założyciele facebookowego profilu "Krakowski Alarm Smogowy". I piszą petycję do władz województwa.

Kraków to najbardziej zanieczyszczone miasto w Polsce. Normy stężenia szkodliwych pyłów są przekroczone przez ponad 220 dni w roku. Tylko w ostatnim tygodniu przekroczenie pyłu PM10 wynosiło 800 proc.!

# 2013

## January, 10

Dust-proof mask march gathers around 300 Krakovians to protest the local authorities' stance concerning air pollution.

## January, 18

Krakow's mayor Jacek Majchrowski issues a letter to the Marshal of Małopolska voivodship in which he mentions the ban on using coal for Krakow's household heating.

## January, 30

As a part of a public hearing process Krakow Smog Alert calls for significant changes, including incorporation of the ban, in the Air Quality Programme for Małopolska during the Krakow City Council debate (technical paper was submitted to the Marshal's Office).

## Marsz antysmogowy przeszedł przez Kraków [ZDJĘCIA, WIDEO]

Dominika Wantuch | 10.01.2013 19:24, aktualizacja 10.01.2013 21:53

poprzednie 12/14 następne



## February, 2

Krakow's authorities try to increase the budget for the exchange of household burning appliances.

## February, 11

Start of the outdoor social campaign with the assistance of a professional PR agency: "Kraków chce oddychać! (Krakow wants to breathe!) No smoging please!" encouraging Krakovians to sign the petition to the authorities initiated by Krakow Smog Alert.



# TIMELINE OF EVENTS

The campaign has worried Krakow's mayor Jacek Majchrowski who posted on his Facebook page: "I read in today's newspapers that billboards saying that Krakow is one of the most air polluted city in Europe will be seen around the whole city. With all respect to the activities of the Krakow Smog Alert and my recognition of its commitment to improving the quality of air, I received the information with very mixed feelings. (...) What raises my doubts is the fact that the information on the posters will be also in English. Is that in the interest of the inhabitants of the city when our city benefits largely from tourism? (...)"

Response of the media was firm and immediate: "Mr. Mayor has gone too far - this is my impression after reading his comments on the Facebook page. First of all, to be honest it's necessary to inform everyone: both residents and tourists that Krakow is the most polluted city in Poland, because as we already know particular matter which is in our air is not indifferent to our health. Secondly, Krakow Smog Alert is an initiative of the inhabitants, if Mr. Mayor wants to organize an educational campaign, he should organize it, not advise others what to do. All the more so because for many years the mayor and the provincial councilors seemed not to see the problem of air pollution. The action led by inhabitants is the result of the inaction of the authorities, a signal that it can not be like that anymore. (...)"

## March, 3

Start of a radio campaign "Krakow wants to breathe".

## March, 13

Conference about Krakow's air quality organized by Krakow's medical doctors.

## **Alert i kampania, której przestraszył się sam prezydent**

Dominika Wantuch | 02.03.2013 , aktualizacja: 01.03.2013 15:25

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Andrzej Guła i Ewa Łutomska (fot. Małusz Skwarczek / Agencja Gazeta)

Krakowskie powietrze jest wyjątkowe, można je ugryźć - żartują ludzie na Facebooku. I próbują wspólnie walczyć o poprawę jego jakości. Rozmowa z Ewą Łutomską i Andrzejem Gułą, założycielami Krakowskiego Alarmu Smogowego.

## April

The city authorities start working on the energy poverty alleviation programme, one of the important postulates of the Krakow Smog Alert petition.

## May, 28

Opening of the exhibition "We want to breathe" with graphics inspired by the comments of the people who signed the petition. Also a conference on Krakow air under the media patronage of "Gazeta Wyborcza" and supported by IKEA.

## June

Opinion poll conducted by TNS OBOP Research Institute for Radio Krakow shows that investing of EU funds in air quality improvement is a top priority for Krakovians.

## June, 26

Establishment of a special Commission for Ecology and Air Protection in Krakow's City Council.

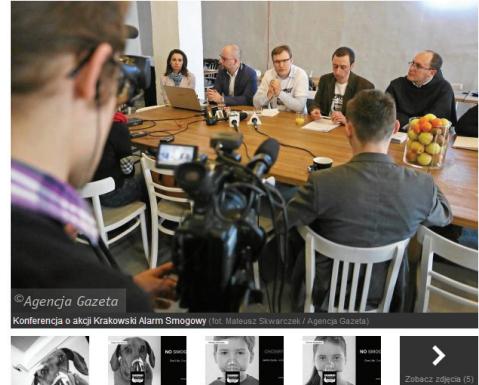
## July

Thanks to our activity Krakow's air quality has continued to make headlines even after the winter ended (in the past the media would stop writing about it when the spring started). By that time the subject was raised more than 100 times by local and national journalists. The local supplement to "Gazeta Wyborcza", the largest circulating, opinion-making newspaper in Poland, issued a special series of articles covering the topic. Also "Przekrój", the oldest Polish weekly magazine, published a coverage of this issue.

## Kraków: Antysmogowa kampania wystraszy nam turystów

Dominika Wantuch | 13.02.2013 , aktualizacja: 13.02.2013 19:06

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Konferencja o akcji Krakowski Alarm Smogowy (fot. Mateusz Skwarczek / Agencja Gazeta)

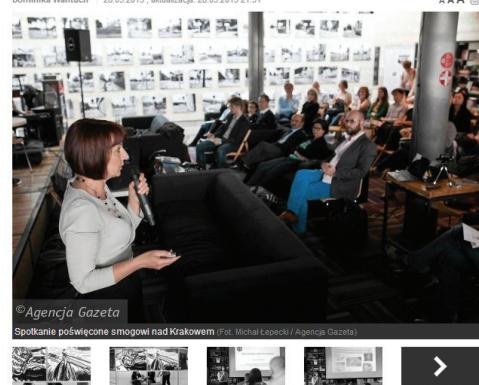


Zobacz zdjęcia (8)

## Czyste powietrze to nie przywilej. To podstawa egzystencji

Dominika Wantuch | 28.05.2013 , aktualizacja: 28.05.2013 21:31

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Spotkanie poświęcone smogowi nad Krakowem (fot. Michał Lepęcki / Agencja Gazeta)



Zobacz zdjęcia (8)

Czyste powietrze to jeden z ważniejszych elementów, który wpływa na jakość życia w mieście. Wspólnymi silami możecie dokonać pozytywnych zmian i uczynić Kraków miastem XXI wieku - zachęcał we wtorek w Czulym Barbarzyńcu Steve Howard, światowy ekspert w dziedzinie ochrony środowiska.

# TIMELINE OF EVENTS

## July

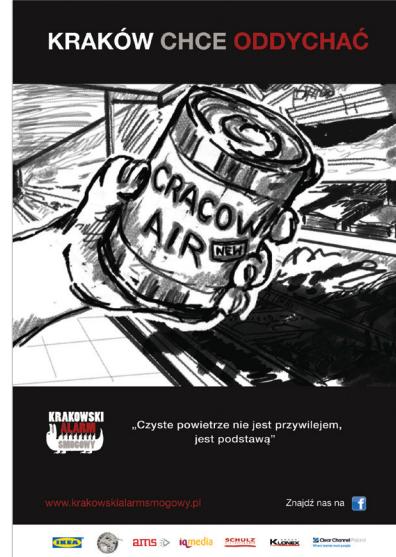
Agreement between Krakow and the Regulatory Assistance Project to help create the legal regulations and the social aid programme connected with the ban on burning solid fuels in home burning appliances.

## July

Media publish the results of the research conducted by CEM Market and Public Opinion Research Institute showing the rising trend of installing new coal furnaces in Krakow's individual heating sources.

## August, 19

End of the public hearing regarding The Revision of the Air Quality Programme for the Małopolska Region which includes the ban and other significant changes. The authorities responsible for drafting of the programme received comments from 300 people and 30 organizations, and only 3 of them expressed any doubts about the ban, the rest supported it. Particularly important was the call from 200 members of Krakow's medical community supporting the ban. Krakow Smog Alert submitted a paper including a second round of comments on the Air Quality Programme.



## September, 16

Launch of the new Krakow Smog Alert social outdoor campaign with the assistance of a professional PR agency.

# KEY ACHIEVEMENTS:

- The campaign has mobilized public funding for air quality programmes, including:
  - allocation of Euro 120 million from structural funds 2014-2020 to air quality programmes in Krakow (including measures like subsidies to replace coal stoves and grants for energy efficient investments in the housing sector)
  - a six-fold increase in the local budget for the replacement of coal based heating appliances in 2013, as compared to previous year
  - an energy poverty alleviation programme prepared by city authorities (subsidies to energy bills for the poorest households)
- building social understanding and acceptance for the ban on the use of solid fuels for household heating in home burning appliances in Krakow (in opinion poll conducted by CEM Market and Opinion Research Institute 85% of Krakovians supported introduction of the ban)
- raising social awareness of the causes behind the Krakow's smog and its health effects
- initiating a wider debate and political process to implement the ban on coal
- close cooperation with local and regional authorities (joint development of technical solutions to air quality problems)

15 thousand  
Krakovians  
signed the  
petition calling  
for solid fuel ban  
in Krakow



## NO SMOGING PLEASE

Krakowskie powietrze  
jest niezwykłe.

Co roku zabija około  
400 mieszkańców miasta.

Powiedz NIE.  
Podpisz Petycję.

[www.nosmoging.pl](http://www.nosmoging.pl)