



**clean air**



# **CLEAN AIR FOR EUROPEAN CITIES**

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## WHY WAS A PROJECT »CLEAN AIR« NECESSARY?

Over 400.000 people within the European Union have suffered from premature death caused by air pollution in the year 2010 only, according to EU-officials. Reasons for this are among other particulate matter, nitrogen oxides, Diesel soot, which enter our lungs or even blood circulation when inhaled. The consequences may be respiratory symptoms, asthma or cardiovascular diseases. Some studies even suggest that particulate matter may lead to dementia, cancer and heart attacks. The social costs of illnesses due to air pollution, cumulate to an amount of 330 to 940 billion Euros per year, states the EU.

Goal of the EU-policy is “to achieve levels of air quality that do not give rise to unacceptable impacts on, and risks to, human health and the environment”, stated in the Sixth Environment Action Programme of the European Community in 2001. On this account, the EU adopted the so called Air Quality Directive in 2008. It combines five previous directives on air quality and defines emission limits for several pollutants such as particulate matter, nitrogen oxides, sulphur oxide, lead, benzene, carbon monoxide and ozone, as well as how to supervise those limits. Until 2030, these limit values for air pollutants shall lead to a reduction of deaths caused by air pollution by 54%. The problem: innumerable European cities regularly violate the codified limits and, thus, health of people is deteriorating persistently.

Even though the Right on Clean Air has been established through the jurisdiction of the European Court of Justice and all EU member states have implemented the EU directive into national law, effective measures to meet the limit values are not in action on national or local level. Cities play a key role when it comes to solve this problem. The volume of traffic is especially high here and, thus, pollution is as well. Since on top of that a big share of people lives in cities, also a particularly high amount of people are suffering from air pollution here. Measures need to target a reduction of the harmful pollutions in the traffic sector, since it carries the highest share of air pollution within cities.

For the air quality directive to finally reach into the cities of the EU member states and the air to actually improve, nine European environmental NGOs joined forces at the “Clean Air” project in 2012. In it public authorities, politicians, industry, the public, NGOs and science are brought together and enabled to implement effective measures improving air quality, through knowledge sharing, good practice transfer as well as information campaigns and joint solution development. To do so, the nine project partners put into practice subprojects. The total of those subprojects should raise the awareness on the problematic nature of bad air quality among decision-makers and present them corresponding methods of resolution.

The nine project partners are located in six different European countries: Germany, Austria, Denmark, Hungary, Slovakia and Belgium. The project coordination was accepted by the German transport and environment organisation Verkehrsclub Deutschland (VCD). Three more project partners are located in Germany: the environmental NGOs Deutsche Umwelthilfe (DUH), Naturschutzbund Deutschland (NABU) and Bund für Umwelt- und Naturschutz

(BUND). The Austrian transport and environment organisation Verkehrsclub Österreich (VCO) supported the project as well as the Danish Eco-council. In addition, support came from Hungary by the Clean Air Action Group (CAAG) and from Slovakia by the Centre for Sustainable Alternatives (CEPTA). At EU level, the organization Transport & Environment (T&E) with headquarters in Brussels has supported the project.

## ACTIVITIES IN THE PROJECT AREAS AND THEIR SUCCESS

The subprojects of the »Clean Air« -partners can be divided into several different project areas: capacity building, car traffic, public transport, bicycle policy, shipping and the advice and support of decision-makers. In the following it is described, which actions have been taken by which partner and which successes have been achieved.



Litigation on Clean Air in Europe; Design: DUH

### Capacity Building - Developing legal and practical skills

If limit values are violated due to a lack of regulations and measures, citizens can legally enforce the introduction of effective measures. However, citizens know rarely about this right. Therefore, DUH has organized ten workshops for NGOs during the project period. Those workshops imparted the knowledge, which options organisations and affected citizens have to sue institutions for the right to clean air. In Berlin (2x), Brussels (2x), Prague (2x), Vienna, London, Bratislava and Lisbon experts mediated to interested participants, how to act the most promising during a lawsuit. DUH has accumulated own expertise in this field in recent years: by supporting affected residents or as a sole plaintiff it has brought some complaints on air pollution on the way – and was successful with every single one. Thanks to the workshops a transfer of knowledge from DUH to other NGOs throughout Europe was originated and, thus, those NGOs are able to carry this knowledge further now.

On top of the workshop, DUH has also created a website that provides information on the legal framework of the EU clean air policy for interested association representatives, regional authorities and local authorities of all Member States and

#### Alan Andrews, lawyer with Client Earth

»By launching and supporting legal actions in Germany and across Europe, DUH made an invaluable contribution to the development of the right to clean air in Europe.«

interested citizens. In addition, DUH has directly supported citizens and environmental organisations in several Member States to sue for their right to clean air. With all these actions the right measures to reduce air pollution from municipal authorities was familiar, scattered and even applied directly.

## Car traffic in the city - environmental zones, city tolls and eco-driving

Car traffic plays a major role for air pollution in cities: the pollutants coming from the exhaust, the particulate matter, caused by tire wear and whirling, soot from diesel vehicles, and so on. A first and effective measure is to keep cars, which emit a particularly large number of harmful pollutants, out of the cities. To do so, several measures are possible: an environmental zone, an ecologically staggered congestion charge or mandatory retrofitting of cars with particle filters. BUND organized workshops with various German cities to discuss these various measures, to analyze positive and negative experiences and draw up guidelines for other interested cities. Moreover, the measures of European cities have been compared, evaluated and an annual ranking of the most committed municipalities was published. With these actions, the air quality managers of cities have been reached, exchanges between institutions have been strengthened and the public was provided with information about the issue.

VCÖ as well has discussed appropriate measures in cities to reduce air pollution at two events in Vienna with stakeholders from politics, administration, science, NGOs and private companies. The emphasis was on the feasibility and the effects of a congestion charge as a means of improving air quality. DUH, on the other side, has addressed the effect of particle filters and environmental zones at expert discussions. For this purpose, representatives of car and filter manufacturers, car inspection associations, chambers of crafts, garage associations and politics met every six weeks. The meetings and discussions increased awareness on the effects of air pollution with various actors from different sectors.

However, the introduction of environmental zones alone is not enough to reduce the pollutants by motor traffic. Only with consistent control and monitoring environmental zones can unfold their positive effect on air quality. Therefore, DUH has interviewed authorities, cities and towns in all 78 German environmental zones according to their control behaviour. This has increased the pressure on the relevant authorities to design environmental zones in a more effective way.

CEPTA has chosen a different approach to reduce emissions from cars. The project partner developed a method, how driving schools may teach eco-driving, since ecological driving reduces emissions and thereby improves air quality. The method was developed in collaboration with driving schools. Thus, the method is designed as practical as possible and

### Christer Johansson, Stockholm - Uppsala County Air Quality Management Association

»I found your Best-Practice Guidelines for municipalities on your web site very informative. They present in a condensed form the requirements, methodologies and expected outcomes of different actions to improve air quality. Good also with the example cities, and the highlights of possible additional steps that could make such actions more effective. Very good overviews!«



Photo: VCÖ



**Maria Vassilakou,**  
Vice-mayor Vienna

»VCÖ plays an important role within the political debate concerning clean air in Austria. Clean air is one of the crucial preconditions for healthy cities. VCÖ pushes forward improvements and political discussions via numerous fact sheets, stakeholder events and public awareness raising.«

was enacted directly. Moreover, CEPTA created a certification scheme, whereby the developed teaching method is also applicable to other countries.

In all these proposals to reduce emissions of car traffic, it must be noted: ultimately, the most effective measures to improve air quality are those measures that prevent car traffic. Hereby, public transport and bicycles play decisive roles.

Photo: Lukas Beck

### **Public Transport – Clean Busses as support for sustainable transport**

The decisive advantage of public transport over cars: many people at a time can be transported in one vehicle from one place to another, while cars are used mostly by individuals or only by few people at a time. Converted to the number of people who use the vehicle, the emissions of vehicles of public transport is, thus, considerably lower than in a car. And yet, buses for public transport, usually fuelled by diesel, have a significant proportion of pollutant emissions in cities. One way to change this is the retrofitting of buses with diesel particulate filters. This measure can reduce particulate emissions by more than 95%. VCD has organized specialist events on this topic in Germany, Poland and the Czech Republic. On top of that, VCD informed and raised awareness among citizens, administration, transport companies and politicians via publications and in cooperation with local partners. With the aim to create an understanding of the interrelationships between air pollution and technical measures, roundtables with



Photo: Danny König / pixelio

representatives of ministries, local authorities, transport companies and NGOs had been organized in Berlin, Warsaw, Prague, Krakow and Dusseldorf. The participants not only discussed measures to reduce the emissions of the public bus fleet, but also developed and initiated tools to improve air quality and concrete implementation steps.

The Hungarian Clean Air Action Group (CAAG) campaigned for the retrofitting of public buses with particle filters in Budapest, since the public buses in Budapest have reached an average age of 11-18 years and, thus, have a great impact to the high air pollution levels. To achieve this goal, 8,000 postcards were collected at a petition campaign and have been handed over to the office of the Hungarian Prime Minister. On top of that, a travelling exhibition informed interested citizens on particulate matter and, in addition, a meeting with parliamentarians was organized. Thus, the issue was not only made known to the public, but also carried into Parliament. With great success: During the project period the Budapest Transport Corporation (BKV) began with the replacement of the bus fleet. About 600 cleaner buses have already been purchased and at least 150 more will follow.



Photo: CAAG

## **Bicycling – Most eco-friendly transportation with a need to catch up**

In addition to promoting public transport, an active and effective cycling policy is one way to reduce individual car traffic and thus to improve air quality in cities. Designed and performed by VCD, the project European Biking Cities advanced mutual learning between European cities in cycling policy. A network of six cities with an ambitious cycling policy was created. These cities are Bolzano (Italy), Brighton & Hove (UK), Mannheim (Germany), Potsdam (Germany), Strasbourg (France) and Vitoria-Gasteiz (Spain). Thanks to the network, the cities were able to share their positive experiences and learn a lot from each other.

Moreover, VCD created a brochure with the experiences of the network, which is entitled „European Biking Cities: Good Practices from six pioneering European cities“. This was presented at the international Velo-City conference in Nantes. Thanks to the brochure, other cities benefit from the good practices, which are divided into three main topics: first, the importance of the relationship between cyclists and pedestrians for an accepted cycling policy, secondly parking of bicycles as a neglected aspect of cycling infrastructure and thirdly the large potential of cargo bikes in economic dealings. In addition, thanks to a journalist trip to Vitoria-Gasteiz, which was a part of the subproject European Biking Cities, media attention was obtained and the subject was brought to the public.

A city, which already shows that it is possible as a major European city to comply with limits for nitrogen oxides and par-



**The mayor of Strasbourg, Roland Ries spoke at the Velo-city opening in Nantes and demonstrated the high relevance that promoting cycling has for France's leading cycling city. At the sidelines of the Velo-city he met with the European Biking Cities partners**

»Participating in the European Biking Cities project was a great opportunity for Strasbourg to share knowledge and build a network with other European cities with successful cycling policies. As a European capital this kind of European exchange and mutual inspiration among cities is very important for us.«

Photo: Jérôme Dorckel



Photo: Kare Press-Kristensen

ticulate matter, is the Danish capital Copenhagen. Especially with a very well designed cycling infrastructure, the share of car traffic reduced and by that the air quality was improved. The Danish Ecocouncil believes that also other cities should be inspired by this example and should go similar ways. Thus, it designed a brochure on the model city of Copenhagen and organized two workshops on the topic in Berlin and Copenhagen. Thanks to the workshops the best practice example of Copenhagen was brought and set to relevant institutions and decision makers in other European cities.

## Shipping – Rarely noticed air pollution

### Manfred Lebmaier, Head Environmental Strategy, Hamburg Port Authority (HPA)

»When the project „Clean Air in Ports“ started with its first conference in Hamburg, the participants very much welcomed the initiative of bringing different stakeholders together that are responsible to clean up the air in ports. The Hamburg Port Authority participated in the project throughout the whole time and on from the beginning. NABU's engagement to clean up the air in ports coincided with our smartPORT energy initiative and was a perfect sidekick which pushed our decision to build an onshore power supply installation in the port of Hamburg, which was finished in 2015.«

Captain, we need to talk – since shipping has a big problem! Too many ships exhaust gases that are extremely harmful to health and by many times dirtier than those of cars. In addition, port cities suffer from the exhausted gases of cranes, locomotives and other transportation vehicles in ports. Therefore, port cities are especially often affected by exceeding the limit values for pollutants. However, often port cities are exempted from regulatory measures, because of their economic importance. Therefore, also guidelines, which are binding to all European ports, are a long way off. And so, there is still much to do in this often-neglected aspect of clean air policy.

Two projects of the „Clean Air“ project dealt with this issue. NABU organized six conferences in different European port cities: Hamburg, Antwerp, London, Copenhagen, Barcelona and Gdansk. Here, the focus was on possible measures of air pollution in ports and port infrastructure. Worldwide there are many good examples of how ports work ecologically, without developing economic disadvantages: Some ports developed their own clean air plans, other test tools to improve air quality, such as the establishment of shore power connections for ships or the introduction of electric mobility in logistics and loading operations of the port with electricity from renewable sources, more alternative propulsion technologies such as liquefied natural gas (LNG), the retrofitting of diesel engines with filters or fees for particularly bad polluters. However, all these measures do not have general standards and certainly are not mandatory.

At these conferences, experts of ports and port cities firstly exchanged their experiences: Which are the problems and what are possible measures? During the conferences differentiated environmental standards for European ports had been developed. And, thus, the end of the conference series a brochure with results, best practice examples and measures for implementation was created by NABU.



BUND on the other hand was less focused on the ports and the port cities, but on inland waterways instead. Relevant authorities and representatives of the shipping industry have been brought together on a series of workshops. There, the importance of the pollutants on health was explained. Hence, the necessary understanding within industry was created and information at relevant institutions was set.




Photo: Arne Fellermann

### **Advice and assistance to decision-makers – the NEC Directive and Diesel gate**

During the three-year project period, the clean air policy was developed continuously at European level. Especially on two occasions, the project partners were actively involved with political campaigns – and were successful. Firstly, the revision of the NEC Directive and secondly during the Diesel gate, which had its origin at the Volkswagen Group, but affected other automaker, too.

Thanks to the political work of the project partners it was prevented that the necessary revision of the „directive on national emission ceilings for certain atmospheric pollutants“, shortly NEC Directive, fell off the agenda of the European Commission. Instead, the project partners were able to convince MEPs of the revision, for example with a Twitter campaign, which, thus, revised the directive in terms of environmental organizations and the health of people. This was an important success for the project partners, who were able to position themselves as experts in this field thanks to the „Clean Air“ project and were recognized as such by politicians.

The project partners were able to benefit from this recognition in the VW diesel gate, as well. This time most of all the media recognized the project partners as experts in the affair, which



was uncovered by the US Environmental Protection Agency in September 2015. After the German carmaker was convicted to use software that keeps harmful emissions lower in the laboratory test than in real traffic, the project partners could build upon the knowledge gained during the project, and proved their expertise in this subject area. Since the media had dealt rarely with the subject of emission tests so far, experts from the project partners had been valuable contacts – both for research as well as for interviews. In television, radio and newspaper interviews, especially the German partners once again illustrated the importance of clean air and the problems caused by car traffic and presented solutions, which were developed during the project.

Transport & Environment supported the project partners with its work on EU level and was able to put pressure on the EU Commission and the European Parliament to draw the lessons from the affair. Whether this happens is, however, not yet answered.

## THE PROJECT'S IMPACTS

**The great success of the project is to have raised the awareness of good clean air policy in municipalities, authorities and relevant stakeholders. This work is a long-term process, which requires a constant work. The health burden of pollutants in the air is not very much noticeable. Thus, awareness in the population and among politicians is automatically low. Therefore, it needs projects such as „Clean Air“ and its dedicated project partners, which get involved for an active clean air policy at the right places as well as inform citizens and consistently put pressure on policy-makers.**

**In the revision of the NEC Directive, it became clear that this commitment had paid off. If the right actors are aware of the importance of clean air and are addressed with good arguments, then they show the needed awareness for clean air, which all too often is lacking otherwise. Therefore, it is important that the project Clean Air has been created and that expertise on the topic was created and scattered through knowledge transfer. Now it is time to continue the work until consistent policy for clean air is a social and political consensus. Because clean air matters.**



### Reference person and further information

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[www.cleanair-europe.org](http://www.cleanair-europe.org)

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VCD – Association for  
sustainable Mobility

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## Clean Air

is a project by nine European environmental organisations that fight for clean air in European cities. Despite the existing legislative framework and the citizens' right to clean air, continuing violations of air pollution limits remain a problem in many cities. Air pollution threatens health, environment and climate. It's time to take action!

[www.cleanair-europe.org](http://www.cleanair-europe.org)

Started in 2009, the associated campaign „Sootfree for the Climate“ aims to reduce diesel soot emissions, which accelerate climate change and pose a threat to public health. To this day twelve European NGOs have joined the campaign.

[www.sootfreeclimate.org](http://www.sootfreeclimate.org)

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associated campaign



project coordination