Project Coordinator Heiko Balsmeyer introduces Clean Air, a three-year VCD project dedicated to using collaborative efforts to reduce the environmental and climate change problems that air pollution is causing across Europe.
Can you please introduce Verkehrsclub Deutschland (VCD)?

VCD was founded in 1986 as an environmental NGO. We mainly work in the field of sustainable and secure transport. In practice, we support environmentally friendly modes of transportation like walking and cycling, and increased public transport, such as buses and railways. We also recommend cars that are better for the environment than most cars on the road today, such as hybrid vehicles.

Why did VCD start the Clean Air project?

We started the project because of environmental problems regarding emissions and air pollutants. We were working with other NGOs already involved in the Soot Free for the Climate campaign, and decided to widen the focus of this project from only working on diesel soot to incorporating pollutants such as nitrogen dioxide.

What are the aims of the Clean Air project?

Our main goals are to reduce the harmful effects of air pollutants from transport and bring best practice to cities. There is not enough exchange of air pollution problems and solutions between cities in Europe, and this is where we come in.

How prevalent is air pollution in Europe?

The World Health Organization (WHO) recommends certain limits that should be met to ensure people can live a healthy life. However, of estimated 90 per cent of Europeans are living in cities where they have to breathe in air that is harmful to their health, which results in about €500,000 European dying prematurely owing to pollutants in the air. The socioeconomic health costs of air pollution equate to approximately €350 billion per year, making it the most expensive environmental health problem in the European Union. The main air pollutants with high health risks are diesel soot, nitrogen dioxide and ozone.

Can you illuminate the roles science and technology play in the project’s ability to meet its goals?

Science and technology are the basis of our work. We have to build on the knowledge that already exists and the technology that is there. Science helps us to identify the problems that we want to target and estimate costs for different sets of technology and policy scenario.

We also need science to estimate the effects of the measures we are demanding so that we can convince decision makers of their merits. Take this concrete example: we do not have accurate data for the effect of enhancing the share of bicycle traffic and its effect on reduction of air pollution; therefore, we are currently cooperating with the Institute for Advanced Sustainability Studies (Potsdam) to develop a better knowledge base in this field.

As for technology, it is relevant to know what technologies are in use and how long they have been in use for. It is also important to recognise whether beneficial alternatives to harmful technology exist, because if they don’t, we can’t demand their abolition by politicians. Finally, we need to know the costs and the effects of these technologies.

Clean Air is working with countries across Europe to implement low emission zones. Can you describe what these zones are and why you are pushing for them?

Low emission zones are, in a way, a ban of high pollutant vehicles from certain parts of towns. There is a rising interest across Europe in the successful implementation of low emission zones. By introducing these zones, countries are pushing owners of diesel vehicles to find alternatives, such as retrofitting, changing from a diesel to a gasoline vehicle or buying a newer vehicle.

These zones work. With these measures, Berlin cut the share of diesel soot in its air by 60 per cent. This is an important success as diesel soot is highly carcinogenic. We spread interest on this measure to other countries in Europe. For example, we hosted an event in Berlin and invited politicians, traders, companies and other interested parties to come and receive first-hand information about the environmental zone, as well as clean buses.

Copenhagen, Denmark, is considered a model city for reducing air pollution. Why is this city such an inspirational example and how can other cities follow suit?

Copenhagen is a model city regarding particulate matter because it is holding a strict limit. It still has a problem with nitrogen dioxide pollution, but it is not alone in that – all of Europe is having this difficulty. It has an environmental zone and good quality, functioning public transportation, but what really makes a difference in

There are nine NGOs from six European Union countries that are involved in Clean Air:

1. VCD – Mobility of the Future, Austria
2. Transport & Environment, Belgium
3. The Danish Ecocouncil, Denmark
4. Verkehrclub Deutschland, Germany
5. Friends of the Earth, Germany
6. German Environmental Aid, Germany
7. Nature and Biodiversity Conservation Union, Germany
8. Clean Air Action Group, Hungary
9. Centre for Sustainable Alternatives, Slovakia
CLEANING UP THE SHIPPING SECTOR

Teamwork plays a major role in the success of the Clean Air project. One area in which collaboration has been paramount is that of the group’s work with the shipping sector.

Worldwide, this sector makes up 1 billion tonnes of greenhouse gas (GHG) emissions each year; accounting for 3 per cent of the world’s GHG emissions and 4 per cent of the European Union’s (EU) total emissions. If left unchecked, these figures are expected to double by 2050. In response, the EU has called for the sector to reduce its emissions by 2050 to 40 per cent less than 2005 levels.

Currently, Clean Air is working with the sector and the European Commission (EC) to help them meet this target and reduce carbon dioxide and nitrogen dioxide emissions.

“We have direct dialogues with both parties, and we are already seeing results.” For example, Balsmeyer notes that ships are beginning to equip particle filters and reduce knots. They are also bringing electricity from the land to the ships when they are docked, which will allow them to stop their motors in the harbours and prevent unnecessary emissions.

The shipping sector is also starting to use liquefied natural gas (LNG) as an alternative to bunker fuels or diesel. In this area, Clean Air is acting as a resource for information, as LNG ships have only just become available on the market. “It’s just the beginning of this technology,” Balsmeyer explains. “We are gathering more information about LNG because if all ships are to move over to this fuel, it will require a major investment and completely new infrastructure. We want to make sure that other negative environmental effects don’t arise as a consequence.”

Copenhagen is its extensive bicycle traffic – 37 per cent of all trips take place on a bicycle.

Copenhagen was able to convince citizens to cycle because it was rebuilt using the principles of the architect Jan Gehl, who argues that city planning needs to put people at the centre. All over Copenhagen you will find bicycle paths that make it easy and safe to cycle around the city. Moreover, Copenhagen does its best to guarantee safety when cycling in all weather conditions; for example, in the winter, snow is moved away from bicycle lanes first.

The country is still looking to enhance its bicycle traffic – it is building fast tracks for bicycles so that commuters have the possibility of getting into the city faster. Their goal is to increase the share of bicycle commuters up to 50 per cent by 2020. The effect this is having is incredible; it is a livable city where you can communicate without shouting because you have less car traffic and other engine traffic.

The project is aiming to push the results that Copenhagen has experienced out to other European cities, and it has started a network of biking cities to this effect. Which cities are participating and what have been the result?

We want to enhance the share of bicycles in all cities. At the moment, six cities are participating with us: Strasbourg, France; Potsdam, Germany; Mannheim, Germany; Bozen, Italy; Vitoria Gasteiz, Spain; and Brighton, UK. These cities already have a decent share of traffic from cyclists, and we are working with them to create powerful measures to enhance the share of bicycle traffic across Europe.

We have asked representatives about the types of problems they face and how they have dealt with them. A major problem that has come up time and again is that of the relationship between pedestrians and cyclists. A second major problem is having enough safe locations to park bikes.

We have also noted that bicyclists are looking for a strong, functioning infrastructure where paths exist and are well maintained. This is making a significant difference in Copenhagen; for example, as previously mentioned, when it snows the city moves the snow away from the bicycles lanes first. In Berlin, however, they move the snow from the road onto the bicycle lanes. This makes it harder to cycle in the winter in Berlin, but in Copenhagen it is still possible.