



Air pollution and GPP

DUH activities

Robin Kulpa
Project Manager Transport and Air Quality
23 May 2018

Deutsche Umwelthilfe e.V. (DUH) *Environmental Action Germany*

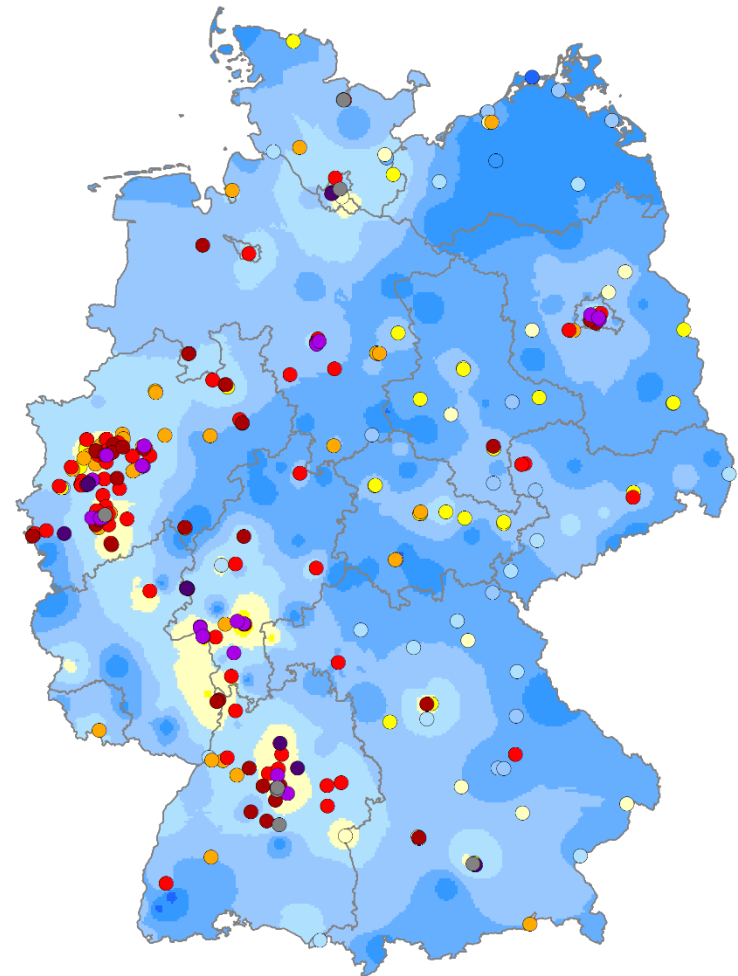
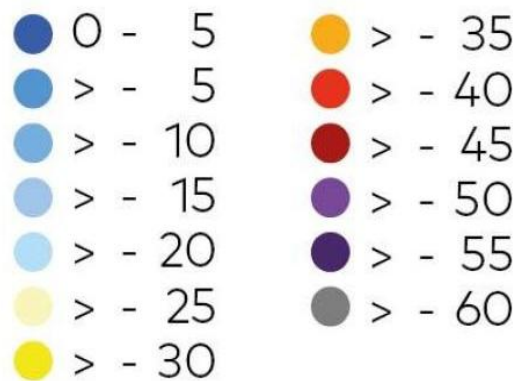
- founded in 1975
- based in Radolfzell (Lake Constance) and Berlin
- around 90 employees (12 in the Department of Transport and Air Quality)



Deutsche Umwelthilfe

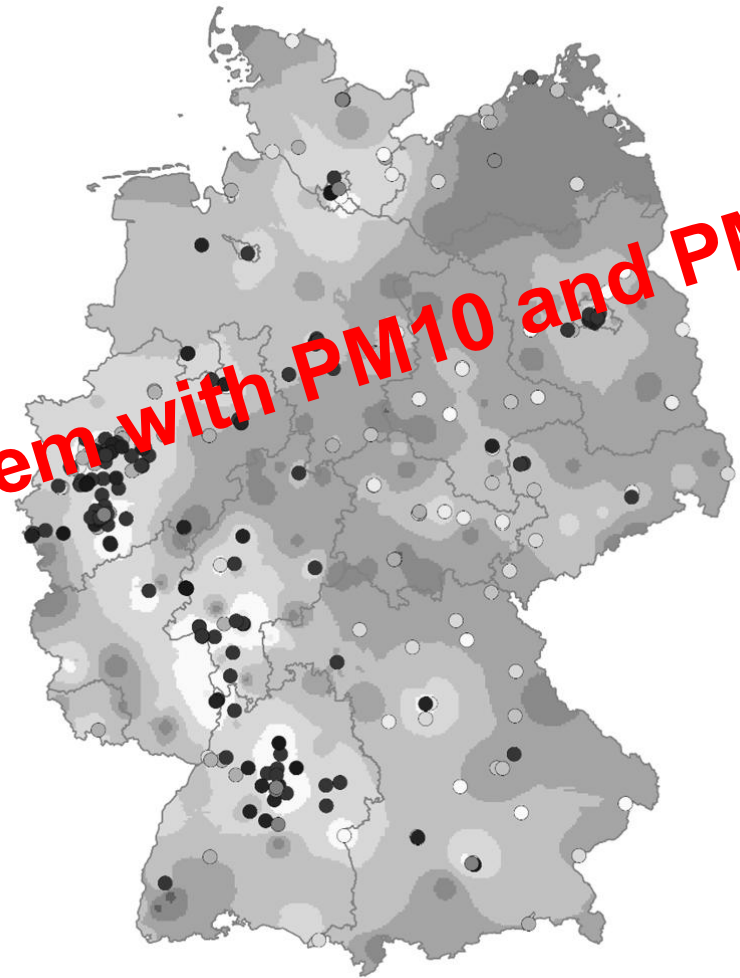
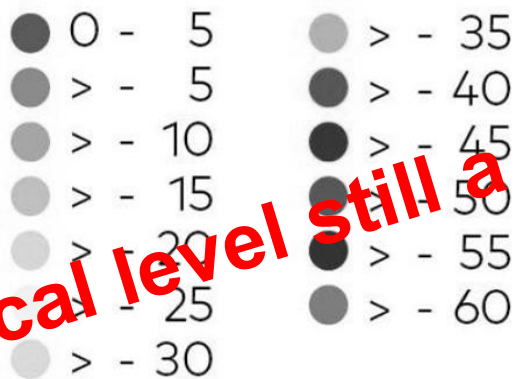
Air Pollution (NO₂) in Germany

Legend



Air Pollution (NO₂) in Germany

Legend



DUH activities on Air pollution

- files lawsuits in 28 cities in Germany
- performs intensive measurements on Diesel-Cars (PEMS)
- files lawsuits against car manufacturers and public administration
- helps cities to find concrete solutions for their AQ-problems (GPP)

“Every european citizen has a right to clean air”

European Court of Justice



EKI - Emission Kontroll Institute

- **PEMS - Portable Emission Measurement System**



GPP Activities of DUH on Air Pollution

Ecolabel e.g. Blue Angel (Blauer Engel)

- construction machinery (soot-free due to DPF)
- replacement catalysts
- stoves and fireplaces

Criteria for GPP with local authorities

- construction machinery / Non Roads
- retrofit for busses / air conditioning in busses



Influencing Air Quality Plans through statements and legal action





- Public fleets, Taxis, Busses
- construction machinery / Non Roads
 - Pressure on local governments to procure environmentally friendly



Construction Machinery / Non-Roads

- Important source of exhaust emissions
 - long-lasting / old
 - not efficient / high consumption (CO₂ – relevant)
 - excepted from certain air quality - regulations
 - health risks of employees on construction site

EcoLabels for NonRoads / Senat of Berlin

Plakette	Kriterien
Baumaschine Motorstandard III  Motorleistung: kW ZF-Ident-Nr. (letzten 6 Ziff.): grau	Maschinen und Geräte ohne zertifizierten Partikelfilter, deren Motoren folgende Stufen gemäß der Richtlinie 97/68/EG einhalten: I Motoren von 19 bis unter 37 kW: Stufe IIIA I Motoren ab 37 kW: Stufe IIIB Die Differenzierung nach "A" oder "B" und die Motorleistung werden in die Plakette eingetragen.
Baumaschine Motorstandard IV  ZF-Ident-Nr. (letzten 6 Ziff.): weißgrün	Maschinen und Geräte, die nicht mit einem zertifizierten Partikelminderungssystem ausgestattet sind und deren Motoren die Stufe IV gemäß der Richtlinie 97/68/EG einhalten.
Baumaschine mit Partikelfilter  ZF-Ident-Nr. (letzten 6 Ziff.): Filter-Seriennummer: dunkelgrün	Maschinen und Geräte, die unabhängig vom Abgasstandard und Motorleistung dauerhaft mit einem Partikelfilter aus- oder nachgerüstet sind.
Baumaschine Motor-Standard V  Siegel + IHS Nr. FZ-Ident-Nr. (letzten 6 Ziff.): blau	Maschinen und Geräte, deren Motoren die zukünftige Emissionsstufe V einhalten

DUH and Berlin Senate developed a set of criteria for construction machinery in public projects

obligatory filter systems for

- PM 2.5 & PM 10
- NOx (SCRT-catalysts)



City-Busses

Important source of exhaust emissions

- Operates in dense urban areas
- Higher operating time than private vehicles
- bound to stop and go traffic

Retrofit options are available on the aftermarket



Demands for Air Quality Plans

Existing-Fleet

- Retrofit with Diesel Particle Filter and SCR (Euro 4 & Euro 5)
- Replace Euro 3 and older

New Purchases

- Low or Zero Emission (Gas or Diesel Euro 6) with exhaust aftertreatment

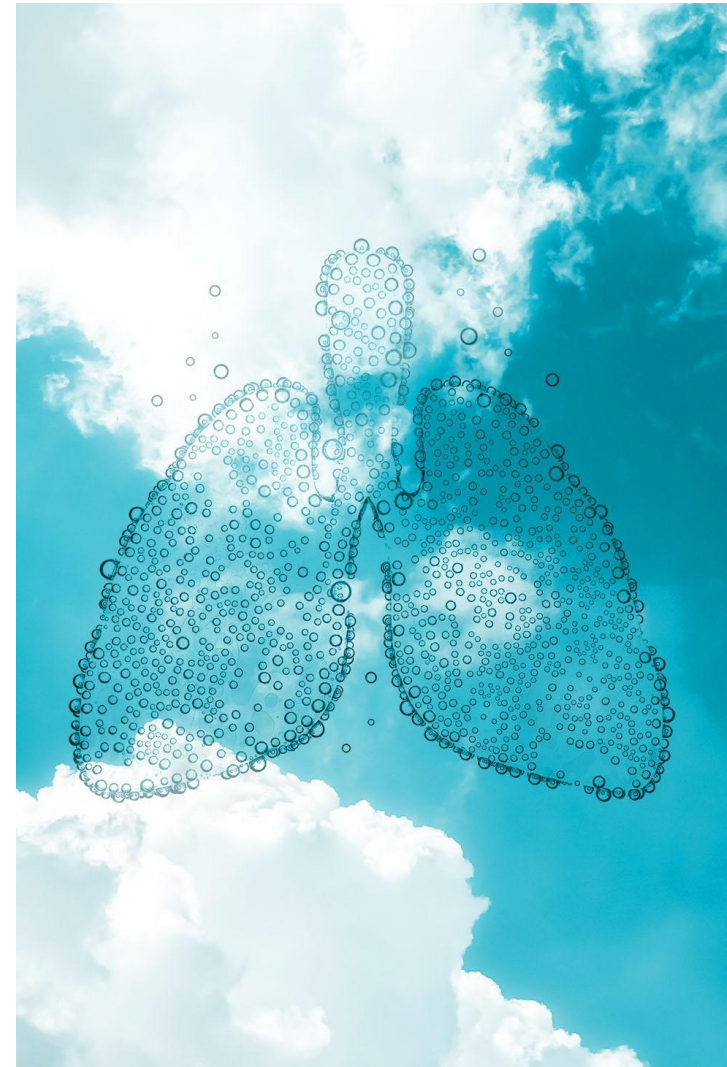


Success

- Facing the pressure of the Air Quality - Lawsuits more and more cities consider a complete retrofit of their bus-fleets
- The biggest Bus-Fleet in Germany (Berlin) will be completely on Euro 6 standard or better by January 2018
- Public transport gets more and more attention

Future activities on GPP

- **Main focus on technical retrofitting of diesel buses with NOx removal systems**
 - In Germany, transport companies are mostly municipal companies
- **New project on hand-operated machines for gardening products and services**
 - For example leaf blowers and chain saws
 - Mostly noisy, diesel-powered and without proper filter technology



The project **Right to Clean Air** (*LIFE15 GIE/DE/000795*)
is co-financed by the **EU LIFE** program of the **EU Commission**.

Robin Kulpa

THANK YOU!

