



TOOL BOX FOR PORT CLEAN AIR PROGRAMS ***Improving Air Quality While Promoting Business Development***



CASE STUDY:

PORT OF ROTTERDAM

RIJNMOND REGIONAL AIR QUALITY ACTION PROGRAM

Air quality in Rijnmond among other regions in the Netherlands, has improved over the last 30 years. However, according to recent figures, emissions have increased beyond their limit values. The increase in emissions poses a serious risk to spatial and economic development and can adversely affect public health. Projections show that emissions for particulate matter (PM) and oxides of nitrogen (NO_x) in the Rijnmond region will exceed European air quality standards set for 2010 if actions are not taken to reduce air pollution.

To address Rijnmond's growing air quality problems, the ROM Rijnmond Executive Council (BOR) has united in a partnership with administrative authorities to develop a package of measures to mitigate air pollution in the Rijnmond region. Better known as the Rijnmond Regional Air Quality Action Program, the program builds upon existing clean air programs. The combination of air quality programs include; Rotterdam's Approach to Air Quality, the Air Quality Master Plan developed by BOR, the Air Quality Plan of Approach by the Rotterdam Metropolitan Region, and the Plan of Approach to Air by the Rotterdam Port Authority.

Through the Top Management Steering Committee on Air, a committee comprised of leaders from all participating parties under BOR, commissioned the DCMR Rijnmond Environmental Agency to develop the Rijnmond Regional Air Quality Action Program. The program is carried out in close coordination with the participating administrative authorities and other parties such as members from the business community. In order to establish greater uniformity for measuring and calculating control measures, the Top Management Steering Committee on Air organized five task groups to focus on different source categories. The five task groups were divided into the following groups; road traffic, shipping, railway, industry and households. Each of the sources identified by the Committee, account for 90% of the emissions in the region.

Clean air strategies were evaluated by the impact on air quality, costs, feasibility, side effects, and time frame. Efforts from the five task groups resulted in 100 different strategies of which 34 were selected as most promising. The proposed strategies aim to impact air quality both in a local and regional manner. Local measures included strategies such as shore side power for ocean-going vessels and low emission zones in urban centers. Regional measures included pushing for stronger EU regulations. The 34 promising strategies are prioritized for implementation through a phased approach, which include: immediate, near-term and long term implementation.



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There are a number of recommended strategies that aim to reduce emissions related to goods movement. The following strategies relate to port/maritime activities.

Shipping:

- ▶ Support for existing and future policies and legislation;
- ▶ Shore side electricity; and
- ▶ Development and implementation of emission control technologies.

Trucks and Road Haulage:

- ▶ Intelligent loading;
- ▶ Clean vehicles; and
- ▶ Clean vehicle technology.

Rail:

- ▶ Conversion of diesel to electric long haul locomotives and
- ▶ Cleaner EU emission standards for locomotives

The consultation in the task groups has contributed to creating support among the parties involved. Consultation between the parties has also contributed to a better mutual understanding and provided tools for reaching joint agreements more quickly. The Rijnmond Regional Air Quality Action Plan also includes a communications and outreach approach to encourage the public to participate in environmentally friendly practices that promote cleaner air.