



POLISH AND NORWEGIAN CITIES
together for climate and energy



"BOSSNETT", BERGEN AUTOMATIC UNDERGROUND WASTE SYSTEM

Sector: Waste, transport, energy efficiency

Timeframe: 2008 – 2020+

Location: Bergen, Norway



PROJECT BACKGROUND

BIR is Norway's second largest waste management company and is responsible for waste handling from approximately 320,000 inhabitants in the nine municipalities owning the company.

Waste trucks and waste bins used to create risk of fire and traffic accidents, especially in the old city centre with narrow streets and wooden houses. Waste bins occupied limited street space, attracted rats and recycling was hampered because the number of bins had to be minimised. Even in newer residential/business areas, traditional waste trucks are not necessarily the best solution, in terms of energy use, noise and pollution.

PROJECT DESCRIPTION

The underground waste system (bosnett) is an automated system that transports waste underground using air pressure. It replaces waste bins, containers and waste trucks. Instead, waste is transported from local waste inlets to a terminal where it is stored in large containers. These containers are picked up and transferred to various recycling facilities.

It is twenty years since this type of technology first was applied in smaller scale in Norway. Smaller

systems can also be constructed without terminals, the waste is instead collected using vacuum systems mounted on waste trucks.

The city of Tromsø has a plant, which directly connects a modern residential area to the nearby waste sorting central (Stakkevollan). Tromsø uses the system in combination with differently coloured plastic bags for different waste fractions. Bergen has instead several inlets for different fractions at the collection points.

From autumn 2015 the Bergen system is in full operation, as the first full scale system for city centres in Norway.

PROJECT RESULTS

Advantages with underground waste systems include better waste sorting, because different fractions (residual waste, paper, plastic packaging, etc.) are disposed of at the same place. The underground waste system is closed and fireproof. In addition to better fire safety, removing waste bins from the city centre gives significantly more effective use of limited street space. Overflowing bins, bad odour and pests (especially rats) is avoided. Less heavy vehicles in the city centre and residential areas give less noise, better traffic safety and less exhaust pollution.



Significant reduction in greenhouse gas emissions and energy use are obtained by less transport and increased recycling of waste.



MORE INFORMATION

Information from BIR, including contact details
www.bir.no/birkonsernet/Sider/ThisisBIR.aspx
www.bir.no/bosstnett/Documents/Bosstnett_engelsk_brosjyre.pdf
www.bir.no/losninger/Documents/Brosjyre_Bosstnett_engelsk.pdf