

Recycling of landfill gas

After large quantities of waste are buried in a landfill it starts to ferment underground, producing large amounts of methane, carbon and hydrogen. If these gases are released directly into the atmosphere, they can significantly contribute to the greenhouse effect. One aspect of recycling landfill gas is that it can decrease greenhouse gas emissions and can also be used to supplement gaseous fuels. Landfill gas can be used to generate electricity, to supply heat and can be used to supply waste disposal plants with electricity. Currently, China's landfill gas collection rate is very low, less than 20%.

Trajectory 1

In this scenario, between 2010-2050 landfill technologies, policy and the market develop relatively slowly and

the landfill gas recycling rate grows to 40%.

Trajectory 2

In this scenario, in 2050 landfill gas recycling is economically viable and the recycling rate reaches 60%.

Trajectory 3

In this scenario, in 2050, with more developed technology and favourable policy, landfill gas recycling is clearly economically viable and the recycling rate reaches 80%.

Trajectory 4

In this scenario, in 2050 all landfill gas is recycled and the recycling rate is 100%.



Devices of gas collection