
LANDFILL

WHAT IS A LANDFILL?

A landfill is a carefully designed structure built into or on top of the ground, in which trash is separated from the area around it. Landfills contain garbage and serve to prevent contamination between the waste and the surrounding environment, especially groundwater. Landfills are not designed to break down trash, merely to bury it. That's because they contain minimal amounts of oxygen and moisture, which prevents trash from breaking down rapidly. So landfills are carefully filled, monitored and maintained while they are active and for up to 30 years after they are closed.

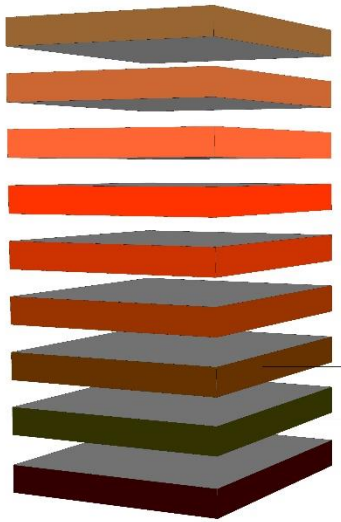
THREE MAIN TYPES OF LANDFILLS

Municipal solid waste (MSW) landfill

Construction & Demolition landfill

Inert landfill

LANDFILL LAYERS



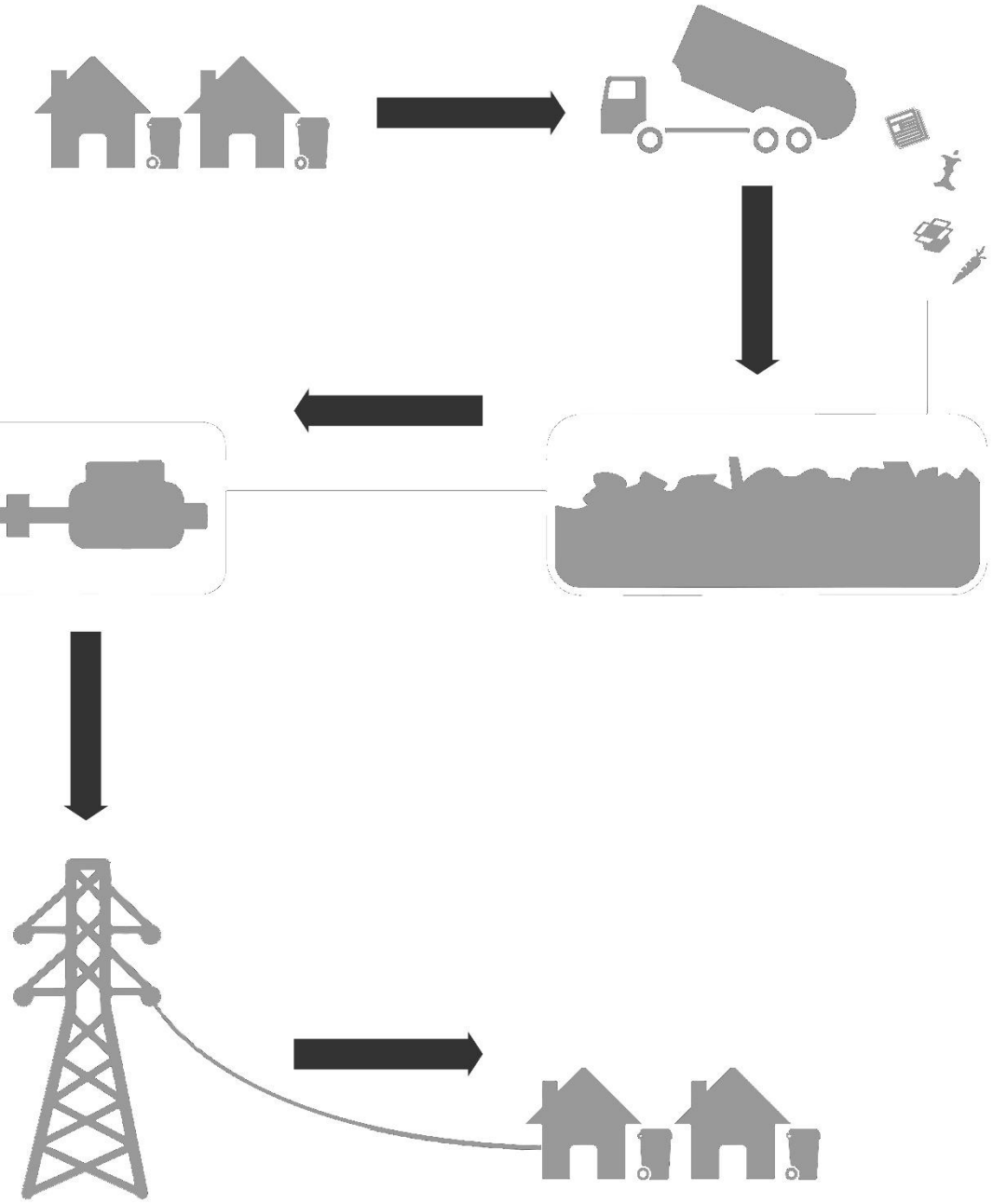
CONVERTING LANDFILL GAS TO ENERGY

Converting landfill gas to energy is an effective means of recycling and reusing a valuable resource. It is an environmentally friendly energy resource that reduces our reliance on fossil fuels, such as coal and oil. Landfill gas-to-energy projects are most successful when partnered with mature MSW landfills, as opposed to new landfills or C&D landfills.

There are three basic types of landfill gas-to-energy facilities:

- **Electric**
- **Alternative fuel**
- **Processed gas**

From Landfill- Gas to Energy Process



1. The cycle begins with the collection and sorting of residetial and commercial waste

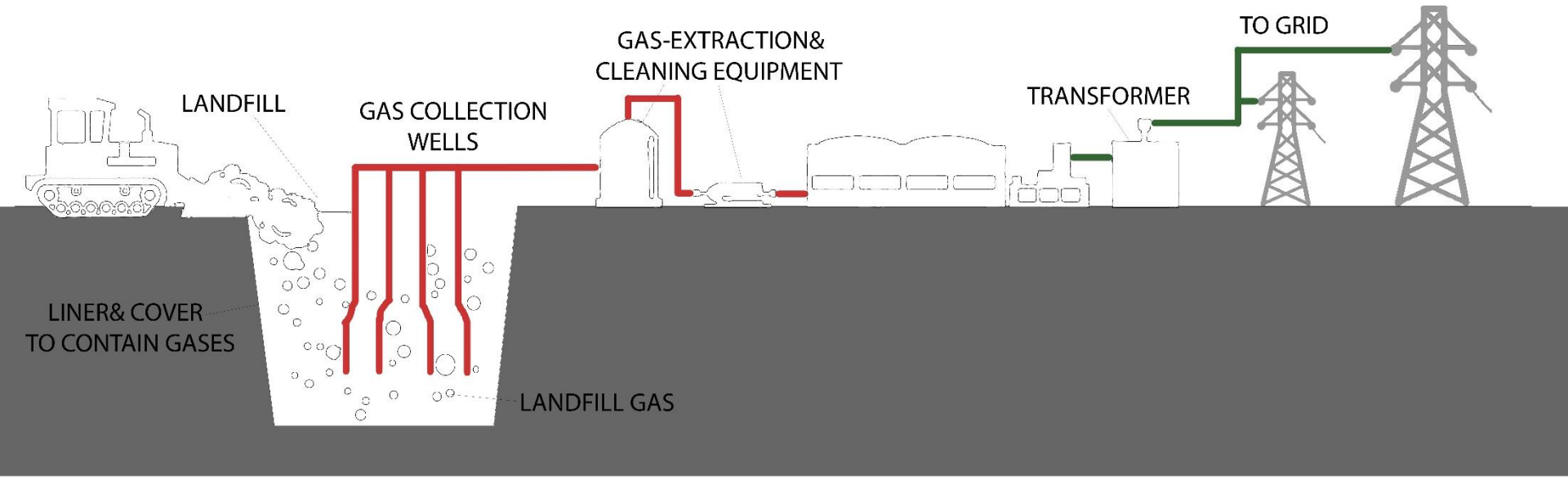
2. Bacteria digest this organic waste and produce methane gas and carbon dioxide as natural by- products

3. The gas is recovered via a series od walls drilled into the landfill, which collect and transportthe gas to a nearby compression facility

4. At the facility, the gas is de- watered, filtered, and pressurized

5. The gas is piped to an electricity generating plant, where it is used as fuel to turn engines or turbinesto generate electricity

Landfill Process on the Field




Park Ariel Sharon

The vision

The heart of the park will be developed by the excavation of 7 million cubic meters of garbage.

A green lung in the center of israel

Park Ariel Sharon

Date of completion : 2020
Team: Latz + Partner, Tahal Ltd, Palgey Maim Ltd, Braudo-Maoz, AFIK, MWH, Starr Whitehouse
Bilder: © Latz + Partner
Client: Yarkon Drainage Authority, Park Ariel Sharon Ltd., The Beracha Foundation
Total area: 8000 dunam
Awards: Green Good Design Award 2010

History- reasons for rehabilitation

History- reasons for rehabilitation

1997- THE MOUNTAIN START TO COLLAPSE

History- reasons for rehabilitation

History- reasons for rehabilitation

1999-BIRDS INTERUPT THE AIRPLANES

First steps..

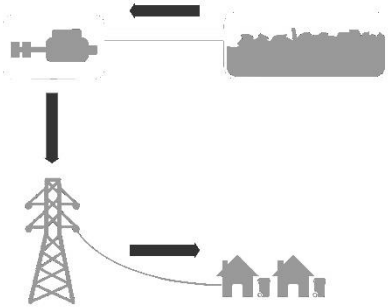
Plastic sheet covering the mountain

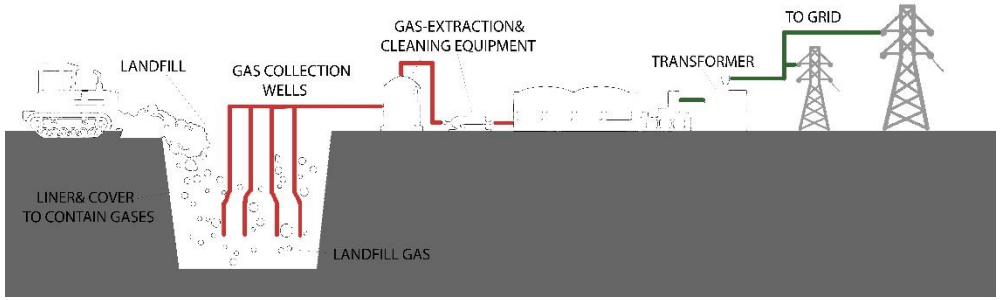
Wall prevents the collapse of the mountain

Using the garbage

Plastic sheet covering the mountain

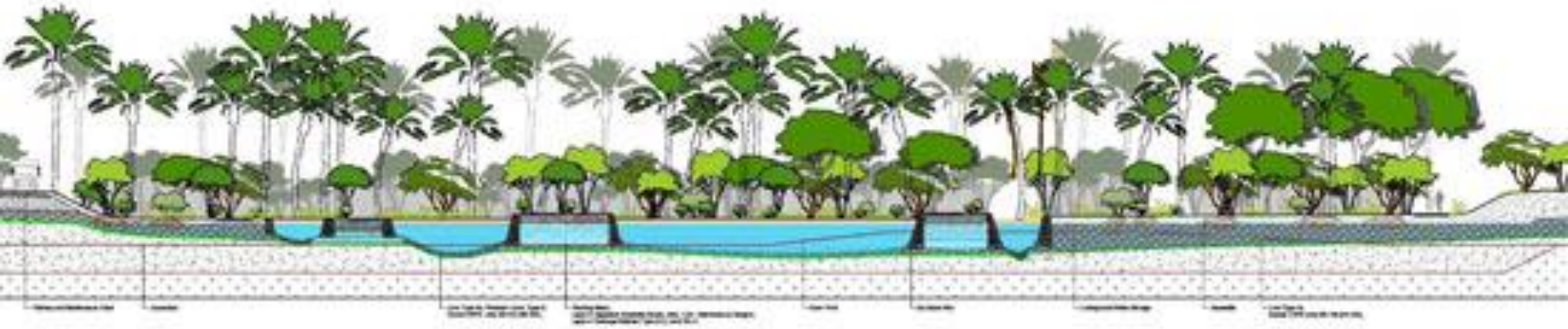
Wall prevents the collapse of the mountain





The purpose of the park is to create an artificial nature of most built in the country, in Gush Dan

Activities will take place in the park:
Amphitheater
Kitt and boating lake
Bicycle riding 25 km tracks total
hard level easy step
Observation zones
Corners orchards
Coffee shops
Performances



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TODAY-2016

FUTURE-2020

ARC, Copenhill / Amager Bakke, Copenhagen, Denmark

In year 2017,

Copenhageners and visitors will witness a waste-to-energy plant that is not only one of the best performing European plants in terms of energy efficiency, waste treatment capacity, and environmental consideration, but also in terms of visual rendition and local acceptance.

Tallest and biggest building in Copenhagen

It will house Denmark’s first ski-slope (on the roof of the plant, no less).

Emit its CO2 emissions - not as a continuous stream of smoke, bursting smoke rings.