WATER CARDS

You need to select both drinking water and wastewater treatment solutions!

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Drinking water solutions:

Drinking water from groundwater

The drinking water is pumped from the ground.

Pros:

-Groundwater does not need much cleaning

Cons:

- Groundwater needs to pumped up, which needs energy
- Can result in lowering the level of groundwater

(1 grid)

Drinking water from the river

The drinking water is taken from the river.

Pros:

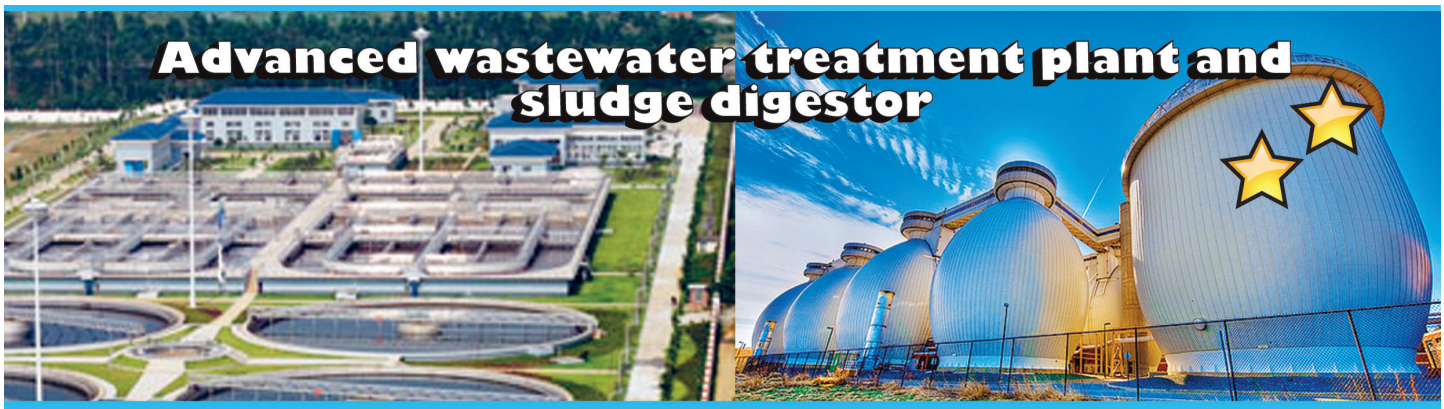
-Low energy consumption for pumping from the river

Cons:

- Higher demand for cleaning of the river water

(3 grids)

Wastewater treatment solutions:



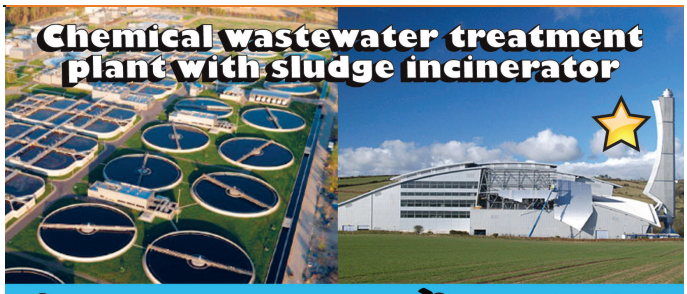
Advanced wastewater treatment plant and sludge digestor

Wastewater cleaned with advanced membrane and UV processes and the resulting sludge is biologically decomposed in an anaerobic digestor.

Pros:
- Technologically advanced
- Energy recovery from sludge

Cons:
- Advanced processes demand electricity
- Sludge digestion demands land area

(3 grids)



Chemical wastewater treatment with sludge incinerator

Wastewater is cleaned using chemicals. The resulting waste-water sludge from the chemical use is then incinerated.

Pros:
-Efficient and relatively easy to operate
-Small need for land area

Cons:
- Pollution from chemicals and from sludge incineration
- Price of chemicals

(2 grids)

Biological treatment of wastewater through a reedbed

The wastewater is cleaning using plants: water plants, such as reeds are used to filter impurities from the water

Pros:
- No need for energy or chemicals

Cons:
- Needs large area

(4 grids)