The next wastewater treatment steps beyond MBR-technique

Direct Potable Reuse

A state-of-the-art solution for drinking water scarcity that matters!
Figure 2: Flow schematic of indirect potable reuse
Figure 3: Flow schematic of direct potable reuse

* Point of introduction into drinking water supply is dependent on local regulations and decisions.
System for Direct Reuse of Water

REducing intake demand up to 65%

Drilled water

Municipal water

Pre-treatment

Unusable water

Potable water

Clean water pond

Non-polluting discharge

Agricultural applications

WATER TREATMENT PLANT

Residue

Direct reusable toilet flush water

Secondary well

Toilet flush water

Resort, villages, camps, residential areas

Waste water treatment plant

Effluent

Dehydrated sludge pellets

Incineration

Water according to the minimum (Dutch) requirements for the preparation of potable water

Water not according to the minimum (Dutch) requirements for the preparation of potable water

Water according to the (Dutch) requirements for potable water
Figure 10.5. Existing washing system for a large-scale vegetable washing facility.
Drilled water

93 l/h

Effectiveness 75%
(depending on local circumstances)

WTP

70 l/h

Root vegetables

Dump tank

25 l/h

Barrel washer

40 l/h

Final rinse

5 l/h

Packaching

Untreated discharge
Drilled water

Clean water pond

Root vegetables
Dump tank

Barrel washer

Final rinse

Packaching

WTP

WWTP

25% Indirect Reusable Water

Nutrients Irrigation

Reduction 56%

41 l/h

52 l/h

75% Direct POTABLE Reusable Water

70 l/h

25 l/h

40 l/h

5 l/h