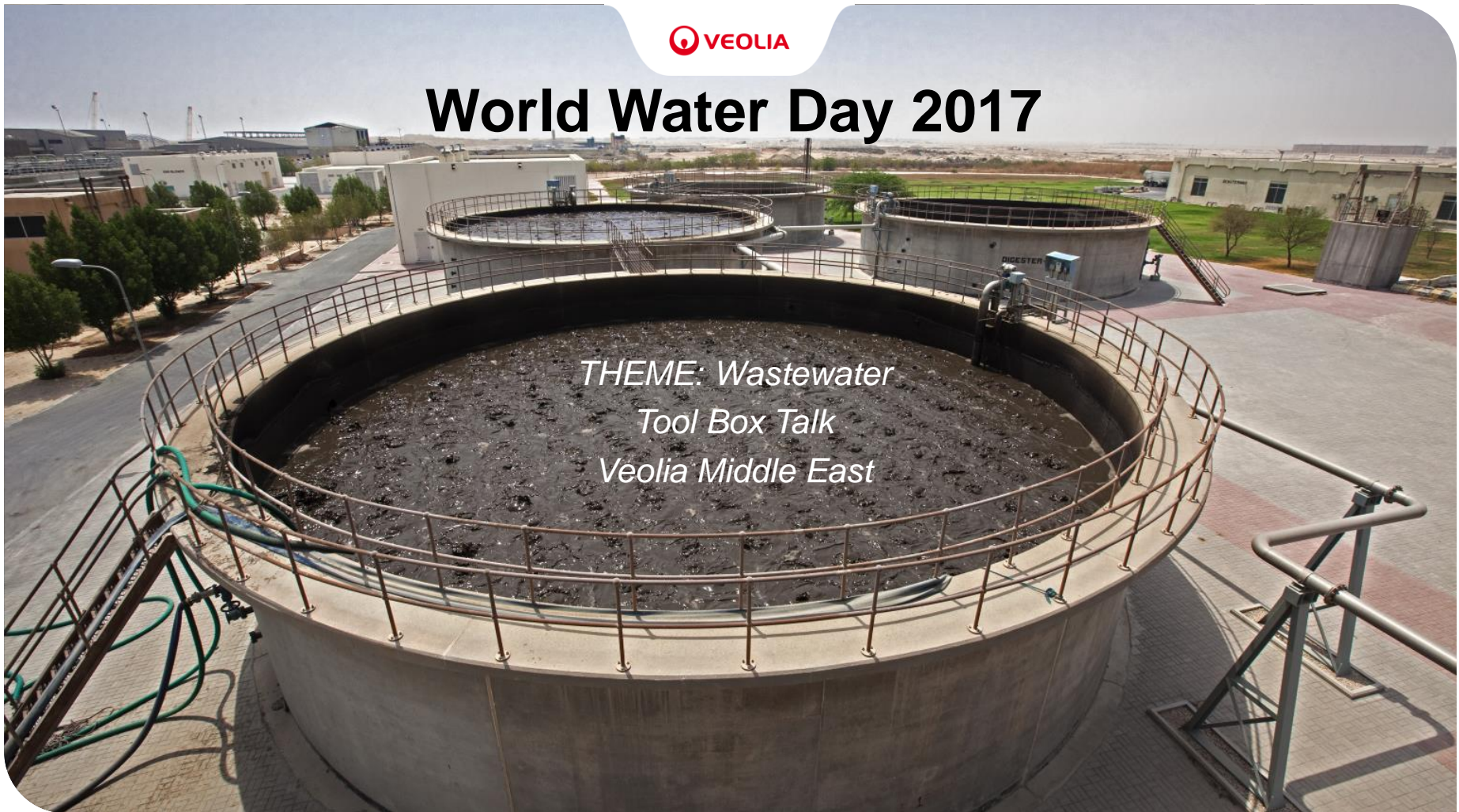




# World Water Day 2017

*THEME: Wastewater  
Tool Box Talk  
Veolia Middle East*





# World Water Day

## Theme: Wastewater

**World Water Day**, on 22 March every year, is about taking action to tackle the global water crisis. Today, there are over 663 million people living without a safe water supply close to home, spending countless hours queuing or trekking to distant sources, and coping with the health impacts of using contaminated water.

Globally, the vast majority of all the wastewater from our homes, cities, industry and agriculture flows back to nature without being treated or reused – polluting the environment, and losing valuable nutrients and other recoverable materials.

**Instead of wasting wastewater, we need to reduce and reuse it.** In our homes, we can reuse grey water on our gardens and plots. In our cities, we can treat and reuse wastewater for green spaces. In industry and agriculture, we can treat and recycle discharge for things like cooling systems and irrigation.

**“Do what you can, do it with others, and do it with passion.”**  
Guy Ryder, Chair of UN-water

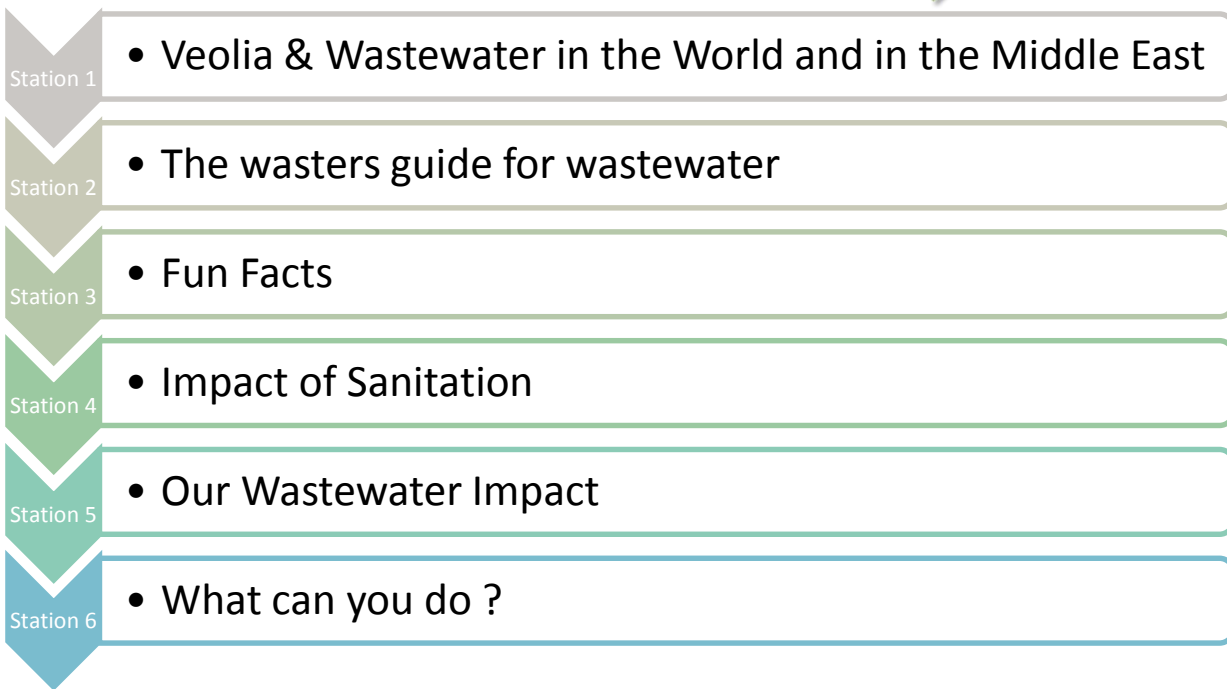


## Veolia Tool Kit

The Veolia Tool Kit for World Water Day is to raise awareness on wastewater, on where it comes from and how it impacts our day to day lives as well as the environment!

The idea is an Interactive Roadshow/Workshop Format with different people at each station to give their aspect of Wastewater

- Each has a station and presents the different facts, devices and challenges
- Teams walk around the stations and speak to each of the stations





# World Water Day

## Station 1: Veolia & Wastewater in the World and in the Middle East

### Veolia & Wastewater in the World

**61 million people with  
wastewater service thanks to  
Veolia Worldwide in 2016**

### Veolia & Wastewater in the Middle East

**1.5 million people with  
wastewater service thanks to  
Veolia Middle East in 2016**

**240 Million m<sup>3</sup> of wastewater  
treated by Veolia Middle East in  
2016**



## Station 2: The wasters guide for wastewater

Every time we use water, we produce wastewater. And instead of reusing it, we let 80% of it just flow down the drain. We all need to reduce and reuse wastewater as much as we can. Here are three ideas for all us wasters!

1. Turn off the tap while you're brushing your teeth or doing dishes or scrubbing vegetables. Otherwise you're just making wastewater without even using it!
2. Put rubbish, oils, chemicals, and food in the bin, not down the drain. The dirtier your wastewater, the more energy and money it costs to treat it.
3. Collect used water from your kitchen sink or bathtub and use it on plants and gardens, and to wash your bike or car.

The water passing through us and our homes is on a journey through the water cycle. By reducing the quantity and pollution of our wastewater, and by safely reusing it as much as we can, we're all helping to protect our most precious resource.

**We're all wasters when it comes to wastewater. Do you know how to reduce and reuse wastewater?**

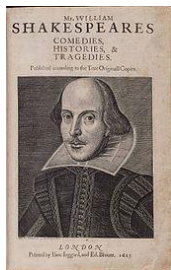
**TAKE QUIZ**





## Station 3: Fun Facts

The water flowing from your tap is the same water the dinosaurs stomped through; the same water Shakespeare drank and that flowed past the pyramids as they were being built. There is only a finite amount of water in the world, and it's endlessly recycled. However, humans are beginning to use more water, more quickly, and nature is struggling to keep pace.



**Ever been to London? Your water will have been through an average of 7 people before getting to you!**

**Don't worry its clean!**

## Station 4: Impact of Sanitation

### Questions / Answers

**Q:** How much is the water usage per capita in  
**A:**

[http://www.fao.org/nr/water/aquastat/maps/World-Map.ww.cap\\_eng.htm](http://www.fao.org/nr/water/aquastat/maps/World-Map.ww.cap_eng.htm)

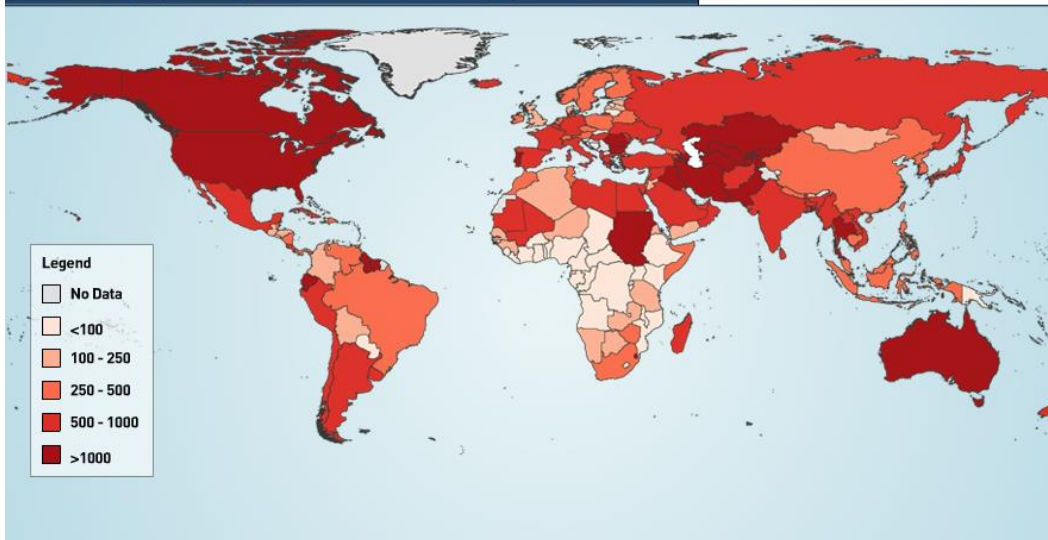
**Q:** How much water we consume?  
How much is available ?  
How much of that we consume ?

**A:**  
[http://www.fao.org/nr/water/art/2008/flash/aquastat\\_maps/gallery1.html](http://www.fao.org/nr/water/art/2008/flash/aquastat_maps/gallery1.html)

Water withdrawal per person (m<sup>3</sup>/year)

Water withdrawn per person for agricultural domestic and industrial purposes (around 2001)

aquastat | FAOWATER



## Station 4: Impact of Sanitation

The Sustainable Development Goals call for poverty reduction, equity, and sustainable development. Lack of sanitation undermines these through preventable illness that takes people out of schools and the workplace.

Almost 1 billion people defecate in the open, and approximately 2.4 billion people do not have access to proper sanitation. Failing or inadequate septic, collection, and treatment systems further exacerbate poor water quality conditions worldwide.



### EXAMPLE

A significant percentage of Cabo Verdeans do not have access to safe water. More than half of poor households receive water from community fountains and the rest from expensive private tankers, meaning that the poorest people often pay the highest prices for water.

Sanitation is another problem among poor households. Only 40% of the country has access to sewage networks or septic tanks; in rural areas, the number drops to fewer than 16%.

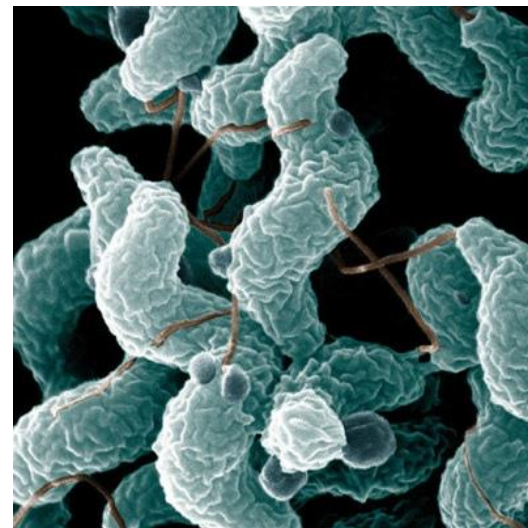
With a new reservoir, and 500 poor families connected to the sewerage system in Tarrafal, the capacity of the wastewater treatment plant has increased. The extra treated wastewater is channeled to farmers who are equipped with drip irrigation kits and trained to reuse the treated wastewater to grow crops.



## Station 4: Impact of Sanitation

Done properly, treatment of wastewater not only protects the environment, it **protects human health** and ensures that a vital resource is available to sustain communities with limited access to freshwater and energy supplies.

Recent studies in developing countries, however, reveal harmful AMR bacteria present in soils irrigated with untreated or inadequately treated domestic wastewater, exposing both farm workers and consumers of these crops to superbugs.



## Station 5: Our Wastewater Impact

### The Obvious:



Go to the  
toilet....

Produce  
wastewater!



### The Not So Obvious:



Fats, Oils &  
Greases

Fatbergs blocking  
the sewers

Takes a  
jackhammer to  
remove!



## Station 5: Our Wastewater Impact

### The Not So Obvious:



Wet wipes



Stuck in the  
sewer or  
equipment

Become as hard  
as concrete!



Pills & Medicine



Difficult to remove

Creates fish that are  
both male & female at  
the same time!



Overdosing fertilizer



Super food for plants

Creates eutrophication  
where plants take over  
& kill everything!

## Station 5: Our Wastewater Impact





## Station 6: What can you do ?

### REUSE

- 1) Use a shower bucket
- 2) Install a rain barrel
- 3) Create a rain garden
- 4) Save water from washing vegetables
- 5) Install a grey water system
- 6) Collect the overflow from water plants
- 7) Reuse excess drinking water
- 8) Reuse unwanted ice



# World Water Day

## Station 6: What can you do ?

### REDUCE

- ✓ How many people live in your house?
  - *More people higher usage*
- ✓ Do you have a green garden?
  - *Check where your irrigation water comes from, can you change it?*
  - *Check the sprinklers come on only at night (less evaporation, so more for the plants!)*
- ✓ Do you have a dishwasher?
  - *Use the Eco setting!*
  - *If you hand wash, fill the bowl! Don't leave the tap running!*
- ✓ Do you have a washing machine?
  - *Use the Eco setting! And reduce the temperature to reduce energy usage*

- ✓ Do you have a car?
  - *Only wash it when you need too*
  - *Use low water methods or even waterless products*
- ✓ How old are your appliances?
  - *Check the ratings of new appliances to choose efficient models*
- ✓ Do you shower or bath?
  - *Showers are much more water efficient but if you do have a bath fill it with the correct temperature to avoid adding extra later*
  - *For showers get a shower timer!!*
- ✓ Do you have a dual flush toilet?
  - *Use it!*

## Station 6: What can you do ?

### Water Saving Showerheads

- Reduce the flow and still get the same pressure!



A normal showers uses 65 litres! This can reduce it to as low as 25 litres!!!!

### Waterless Car Wash

- Still get the car clean but without the water!



### Dual Flush Toilet

- Gives a light flush or a heavy flush to suit the purpose



They are everywhere but do you use them properly?! It can save up to 75,000 litres per year!

## Station 6: What can you do ?

### Tap Aerators

- Reduce the flow through the tap by introducing air
- Still get the same pressure!



Can save up to 12 liters per minute

### Shower Timers

- Watch the time go down but when you go over.... Every minute counts!
- Reduces water & energy



Check out the Green Team Website for Details on where to buy these devices!!