

### Company facts

#### Established

1999

#### Headquarters

Zoetermeer, the Netherlands

#### Sub-sector

Water solutions

#### Applications

Lakes, raw water reservoirs, industrial reservoirs, water treatment plants, ponds and cooling towers.



Global coverage

Website: [www.lgsonic.com](http://www.lgsonic.com)

### Our innovation Awards



Shell LiveWIRE Award 2014



WssTP Water Innovation Award 2014



Global TAG Excellence Award 2015

Over **10,000 LG Sonic algae control products** have been successfully installed in a wide range of applications in **52 different countries**

### Algae control solutions

LG Sonic is a Dutch, privately owned company with the mission to eliminate harmful **chemicals in the environment**. Therefore, the company developed a chemical-free technology that **controls algae** without disturbing the natural balance within water ecosystems. LG Sonic works together with different European Universities and Research institutes, many of which are European funded research and development projects.



### Value proposition

Algal cause problems when blooming in lakes and water reservoirs such as damage to filters/pumps and losses in recreation use. Solutions such as copper-sulfate are besides costly, labor intensive also harmful for the ecosystem.

In order to provide an **environmentally friendly** and **cost-effective solution** to these problems, LG Sonic developed the MPC-Buoy, a floating, solar powered, platform that combines **continuous online water quality monitoring, web-based software, and ultrasonic technology** to effectively control harmful algal blooms in large water surfaces, such as **lakes and water reservoirs**.

The MPC-Buoy eliminates up to 90% of the existing algae and prevents the growth of new algae. Furthermore, the MPC-Buoy allows to reduce TSS, BOD and chemical consumption.

### Track record

- Coordinator of several European FP7 projects: ClearWater PMPC and Dronic: Development of water drones to target and control algal blooms (€3.2 million)
- Official Innovation Partner of American Water, U.S. largest water and waste water utility
- Winner of several innovation awards: Aquatech Innovation Award (2015), Global TAG excellence award (2015), WssTP Water Innovation Award (2014)
- Winner of several entrepreneur awards: Shell LiveWIRE Award (2014), Finalist of Haaglanden region entrepreneur of the Year (2015), Finalist of the Sprout Challenger Award (2015)



**AMERICAN WATER**



“Extensive testing conducted during 2014 showed that the buoys had a significant impact on the algae, allowing the plant to reduce chemical consumption by more than 20 percent, and reducing the concentration of undesirable taste and odor causing compounds in the treated water delivered to customers”.

**Orren Schneider, Manager Water Technology**



### Benefits

- Eliminate up to 90% of the algae
- Reduce chemical consumption
- Reduce TSS and BOD
- Safe for the environment

LG Sonic products provide an **environmentally friendly solution** to effectively **control algae** in lakes, reservoirs, treatment plants, and other applications.

### Ultrasonic algae control products



#### Control and Monitor Algae with the MPC-Buoy

- ✔ Sensor package to provide real-time water quality data
- ✔ Control algae in lakes, dams and water reservoirs
- ✔ Treatment range of 500m/1600ft in diameter



#### Chemical-free Algae Control with the LG Sonic e-line

- ✔ Integrated Aquawiper™ for minimal maintenance
- ✔ Control algae in ponds, cooling towers, wastewater treatment plants
- ✔ Treatment range of 200m/650ft



#### Control biofouling with the LG Sonic industrial-line

- ✔ High effective ultrasonic biofouling control
- ✔ Control biofouling in cooling basins, sea chests, heat exchangers and clarifiers
- ✔ Installation: clamp-on or in the basin itself

### Warning! Toxic algae

Harmful algal blooms are a major environmental problem. These toxic algae blooms cause fish kills, and produces conditions that are dangerous to aquatic life, as well as humans.



### Ultrasonic algae control

The algae control devices from LG Sonic emit ultrasound waves in order to control common types of algae, including the toxic blue algae.

1. Blue-green algae travel through the water column
2. Ultrasound creates a sound layer in the top layer the water
3. The algae die because a lack of light
4. The algae sink to the bottom and are degraded by the bacteria present
5. No release of toxins

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More information can be found at [www.lgsonic.com](http://www.lgsonic.com)