



# ORBITAL SYSTEMS

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CREATING A NEW PARADIGM IN DAILY WATER USAGE

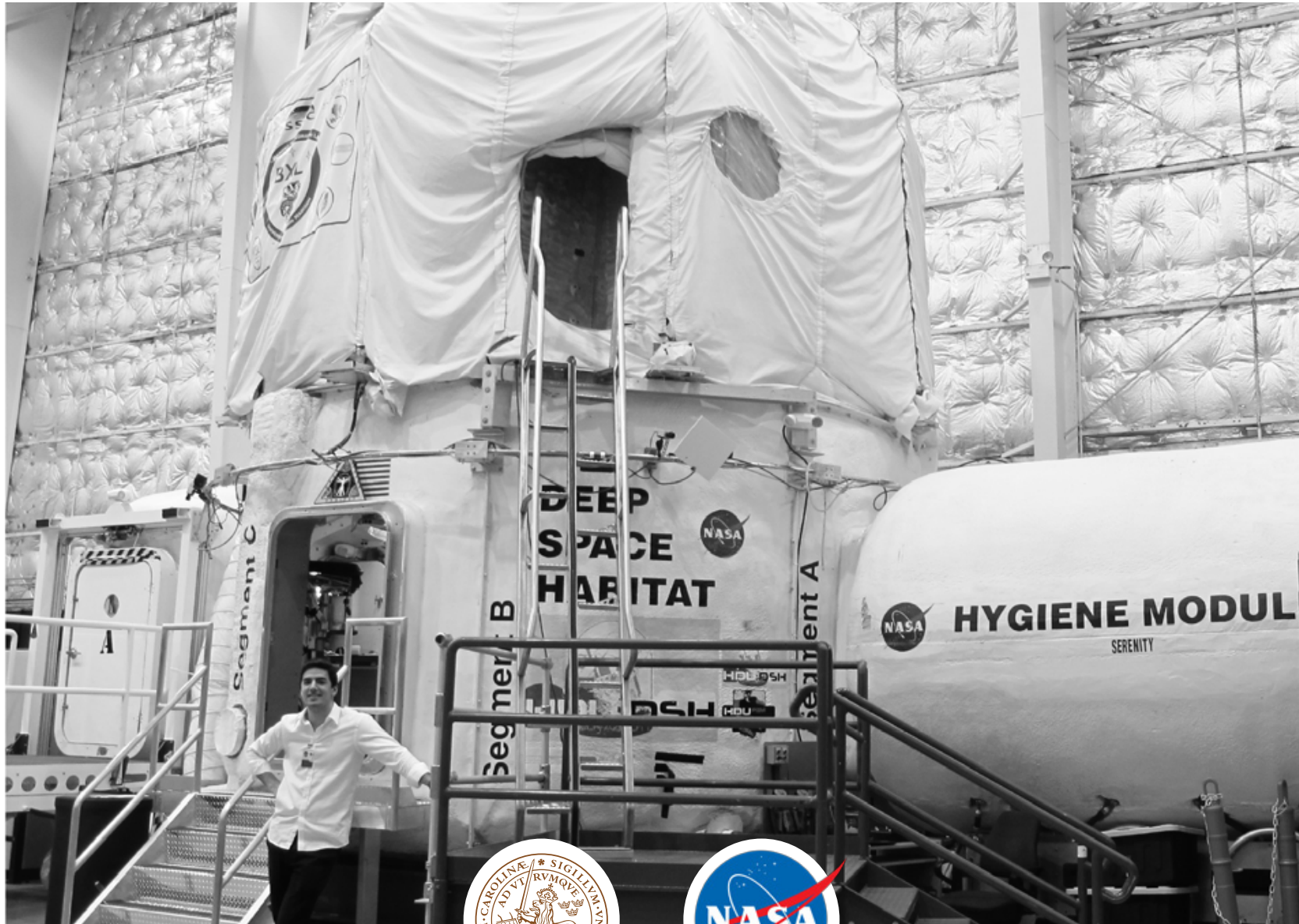
This document contains private and confidential information.

## SUMMARY

ORBITAL SYSTEMS makes showers that save 90% of the water and 80% of the heating energy compared to conventional showers. By purifying, sanitizing and recirculating the water, our technology lets you take a luxurious shower for as long as you'd like, using only 5 liters of water compared to 150 liters used today in a typical 10 minute shower. It is also wirelessly monitored and controlled, thus letting users track their water and energy savings.

The technology was inspired by a collaboration with NASA for space travel and is installed and in use in sports facilities, hospitals, hotels and the military in Europe. It has already saved over one million liters of water and millions of megawatt hours of electricity.

# BACKGROUND



MEHRDAD MAHDJOUBI, FOUNDER OF ORBITAL SYSTEMS,  
AT NASA / JSC AS A PART OF A COLLABORATION PROJECT WITH LUND UNIVERSITY

# TECHNOLOGY

The Patented water recycling technology of ORBITAL SYSTEMS makes the world's most advanced and efficient shower unit, saving up to over 90% Water and 80% Energy, while at the same time increasing comfort and hygiene, by purifying, sanitizing and recirculating the shower water in real-time.

The user experience is superior to conventional showers due to the fact that the Shower of the Future has very precise digital temperature control and higher water flow per minute.

The purification system guarantees that the recycled water is cleaner than conventional water taps.



ORBITAL SYSTEMS'  
WATER RECYCLING TECHNOLOGY

SHOWER OF THE FUTURE

WORLD  
CHANGING  
INNOVATION

DESIGNED & MADE IN SWEDEN



PURIFICATION

10

Seconds  
Capsule Change

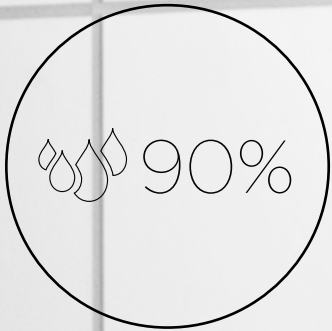
Endotoxin removal > 99,96 %

Micron size particles > 99,995 %

Cyst reduction by at least 99.95%

Guaranteed No Legionella & Cryptosporidium

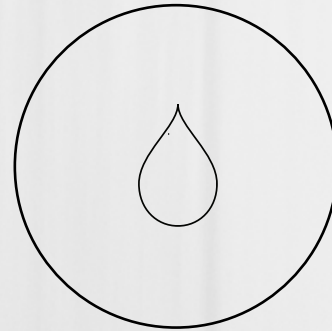
# BENEFITS



WATER  
SAVINGS



ENERGY  
SAVINGS



CLEANER  
WATER



GREATER  
COMFORT

## CLOUD MONITORING

✓ *Water Savings*

✓ *Energy Savings*

✓ *Water Quality*

✓ *Capsule Status*

✓ *Overall Functionality*





REFERENCE INSTALLATION  
SPORTS ARENA



Malmö stad

MONTHLY SAVINGS SINCE SEP. 2014

+50 000 LITERS

+1 200 kWh

REFERENCE INSTALLATION

# HOTEL



MÄSTER JOHAN  
HOTEL

MONTHLY SAVINGS IN 1 HOTEL ROOM  
SINCE DEC. 2014

+10 000 LITERS

+250 kWh



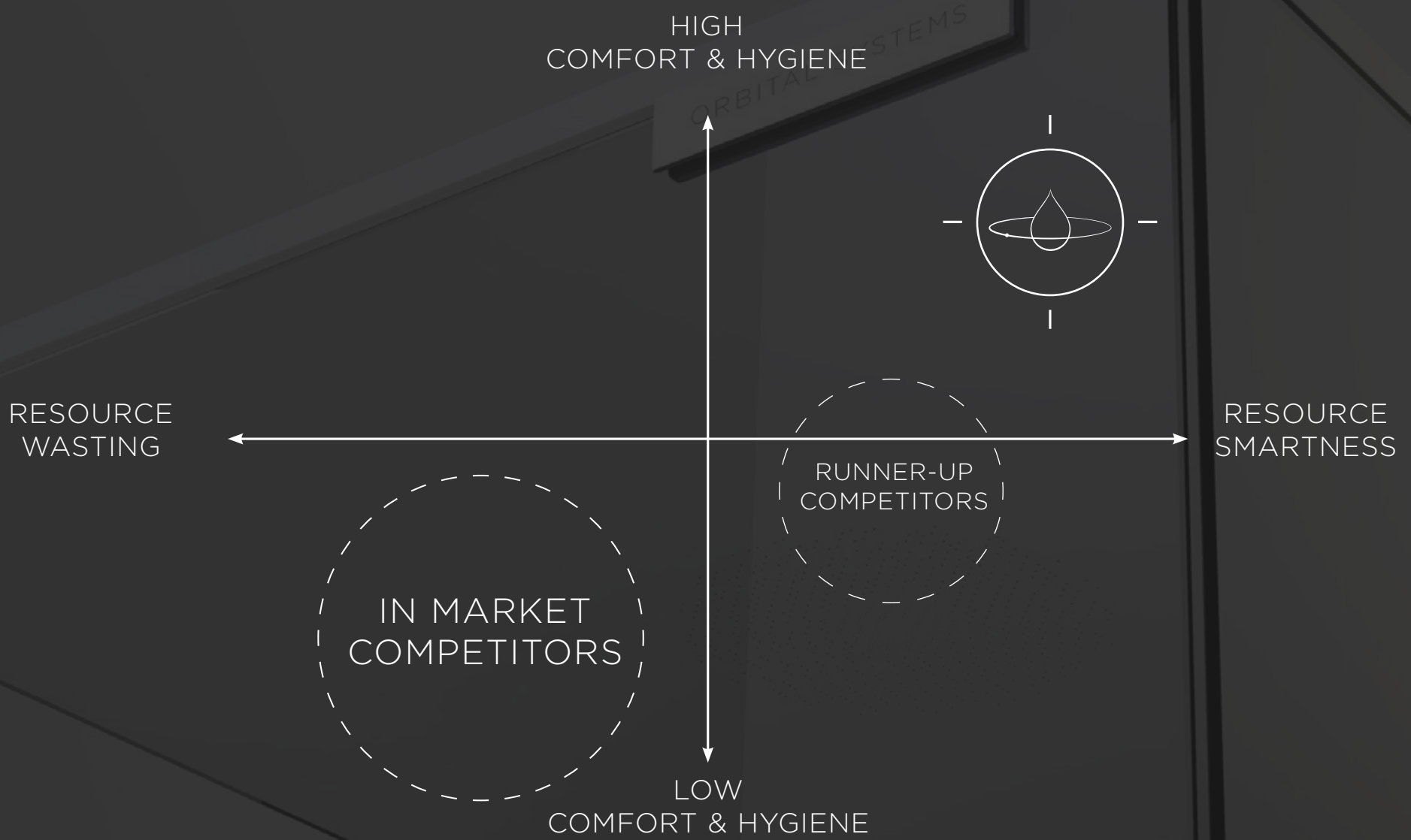
COLLABORATION WITH



SWEDISH ARMED FORCES



# MARKET POSITION



# RECENT AWARDS



## TECHNICIAN OF THE YEAR 2014

\*The Swedish Prime Minister Stefan Löfven handing the award at the Chamber of Commerce.\*



## SKAPA AWARD 2014

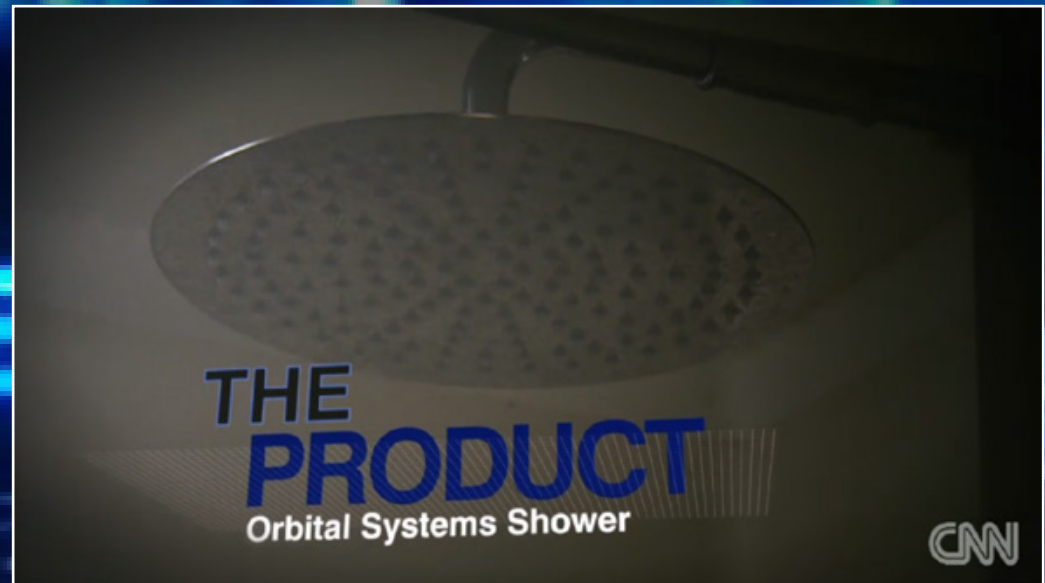
\*Sweden's most prestigious innovation award.\*



## EDISON AWARD 2015 WINNER

\*International and world-renowned innovation award\*

# MEDIA RECOGNITION



**theguardian**

“NASA’s Mars Mission inspires out of this world shower design”

**FAST COMPANY**

“The Shower of the Future cuts water waste to almost nothing”

**CNN**

“Futuristic water-recycling shower cuts bills by over \$ 1000”

# TEAM BEHIND ORBITAL SYSTEMS

## Advisors



Niklas Zennström  
SKYPE Founder

Founder of Skype and mentor to Mehrdad Mahdjoubi. Mr. Zennström is currently the 2nd largest shareholder in ORBITAL. Gives strategic advice regarding business development, international expansion and fundraising.



Larry Toups  
NASA Professional

Chief for Habitation in the Exploration Missions and Systems Office at NASA Johnsons Space Center and Adj. Prof. at Chalmers University of Technology; Provides input on the product development on a frequent basis.



Claus-Christian Eckhardt  
Prof. Industrial Design

Professor of Industrial Design at Lund University. Internationally renowned designer with a wide array of experience from companies such as Omega and Whirlpool. Jury member and winner of several international design awards.

## Founder & CEO



Mehrdad Mahdjoubi  
CEO & Founder

CEO and Founder of ORBITAL. Mehrdad holds a MFA in Industrial Design, Lund University plus additional courses in Economics and Management. Prior to founding ORBITAL, Mehrdad was involved in design collaboration projects at NASA's Johnson Space Center related to Mars Missions. Inventor of the ORBITAL technology, with his name on 7 patent filings as well as 4 Design Registrations. Mehrdad has received awards and nominations such as IF CONCEPT AWARD 2011 and IF DESIGN Talents 2012 for leading other projects during his years in the academia. He is also a winner of the Green Mentorship Award 2012 by Niklas Zennström. In 2013 Mehrdad won Malmö Business Rookie of the Year. In 2014 Mehrdad won SKAPA Utvecklingsstipendium, Sweden's most prestigious innovation award as well as Technician of the Year Award, receiving the award from the Swedish Prime Minister Stefan Löfven at the Swedish Chamber of Commerce.

## Management



Alexander Baltaev  
CFO

M.Sc. in Finance from Lund University. Alexander is specialized in Debt Capital Markets with experience from BNP Paribas Investment Banking in London, UK and Swedbank Investment Banking in Stockholm, Sweden.



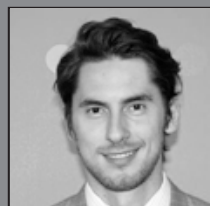
Jakob Nielsen  
CBDO

M.Sc. in Business Administration Jakob holds +10 years of management experience, deriving most recently from American Express, where Jakob was Area Manager, responsible for both the Malmö and Copenhagen offices.



Madjid Mahdjoubi  
CDO

Cross-technology specialist as IOS developer with a background in Electrical Engineering. Specialized in cloud-based hardware and software products that is now commonly referred to as "Internet of Things" product platforms.

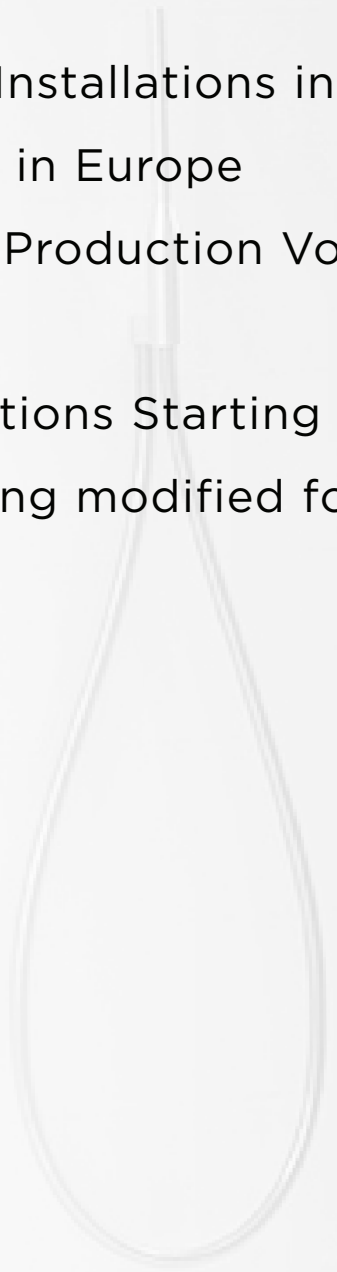


Ilja Koren  
CPO

M.Sc. in Organisational Psychology, London School of Economics. Ilja has +7 years of experience of recruiting talent across Europe into high-growth startups such as Airbnb, Klarna and TranserWise.

# STATUS

- Customer Installations in Scandinavia
- Expanding in Europe
- Delivering Production Volumes in 4Q15
  
- U.S. Operations Starting 3Q15 in Bay Area
- Design being modified for U.S. Standards







# ORBITAL SYSTEMS

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