Urban Sustainability R&D e-Symposia 2021: Innovating for a Sustainable Future

ClimaControl Quantum Resonance Water (QRW)

The next revolution in cooling tower water treatment technology





JOE HENG AL MANAGING DIRECTOR CLIMATEC CORP PTE LTD (SINGAPORE)



Certificate of Achievement

This certificate is presented to

Climatec Corp Pte Ltd

For having been selected as the winner of the Most Innovative Award

for the CapitaLand Sustainability X Challenge 2021.

with its submission:

ClimaControl Quantum Resonance Water - Revolution in cooling tower water treatment

Lee Chee Koon
roup Chief Executive Officer
Capital and Group

Cap/taLand

Lynette Leong Chief Sustainability Office CapitaLand Group

AGENDA

- ✓ Who We Are
- Inspiration behind the innovation
- From idea to prototype
- ✓ The CapitaLand Sustainability X Challenge Journey



WHO WE ARE

Introduction to Climatec Corp:



- Founded and incorporated in 2011 as a private company in Singapore by 4 individuals with diverse backgrounds in engineering, corporate BD, private equity and marketing
- Focus on environmental engineering and clean technology to provide innovative, state-of-the-art and economically viable solutions that work towards safeguarding and promoting sustainable build environments
- Secured 1st tranche of private investment by Hermes-Epitek Corp (Taiwan) in 2012
- 3 core focus areas:









BUILDING INFRASTRUCTURE

INSPIRATION BEHIND THE INNOVATION

Borne out of the following:

- There is a gap between what the market needs and what is available
- Current market offerings for water treatment face limitations and challenges
- Poor performance of current market offerings also result in instances of increased operating expenditure and unplanned capital expenditure for end users
- Users face a conundrum for the lack of a clear and viable solution

FROM IDEA TO PROTOTYPE

Simple, straightforward, no-brainer



Value proposition of the QRW is simple and straightforward...

and raises the bar to unprecedented standards for cooling tower water treatment

Chemical Free **Treatment**



Requires No power to operate



Saves water from blowdown



Saves



Reduces maintenance costs

Recycle water



Provides constant & consistent treatment, NO mechanical or electrical failure risk

Exceed Green Mark Building Requirements of 7 cycles of concentration (COC) - All QRW sites operate 20 to >30 COC

THE CAPITALAND SUSTAINABILITY X CHALLENGE JOURNEY

Key learnings from the CSXC mentorship program

Psychological and technical aspects of presentation skills

Be humble, be bold to try, and be persistent until positive changes are evident

- 5 + 1 Elements to a good pitch
- Clarity
- Conviction
- Positivity
- Authenticity
- Humility
- +1 Likability



Credits to:

- David Lee, Principal Trainer, Luminaries Lab Pte Ltd
- Melissa Ho, Vice President, Wavemaker Partners
- ► The CapitaLand Mentor Team



Marketing pitch is not a onesize-fits-all...

Bespoke to address the needs and value drivers of the targeted audience...

THE CAPITALAND SUSTAINABILITY X CHALLENGE JOURNEY

The QRW value proposition meets all 3 CSXC Focus Areas & more...

1. WATER CONSERVATION & RESILIENCE

80% to over 90% water savings from blowdown of existing system

2. LOW CARBON TRANSITION

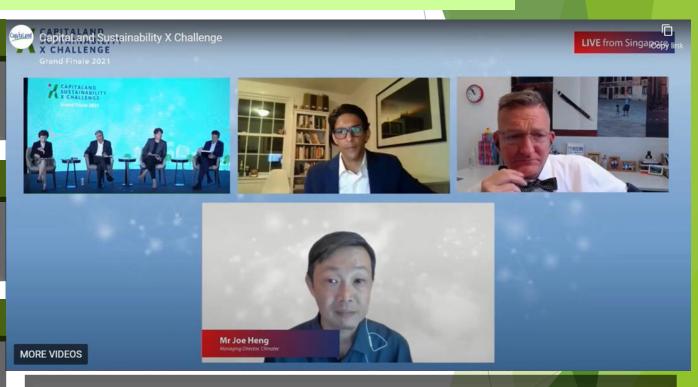
1% to over 5% energy savings from associated chiller systems operations improvement

3. WASTE MANAGEMENT & CIRCULAR ECONOMY

QRW Water is Recyclable for plant irrigation & toilet flushing

+ REDUCES MAINTENANCE & LABOUR COSTS

Avoided cost on reduced frequencies of cooling tower & condenser tube cleaning - 30% to over 50% reduction



Reliable, safe, sustainable and benchmark setting savings meeting all focus areas

Payback range: 18-36 months depending on site conditions and operations

