

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): September 4, 2020

**Sphere 3D Corp.**

(Exact name of registrant as specified in its charter)

**Ontario, Canada**  
(State or other jurisdiction  
of incorporation)

**001-36532**  
(Commission File Number)

**98-1220792**  
(IRS Employer Identification No.)

**895 Don Mills Road,  
Bldg. 2, Suite 900  
Toronto, Ontario**  
(Address of principal executive offices)

**M3C 1W3**  
(Zip Code)

Registrant's telephone number, including area code **(858) 571-5555**

**Not Applicable**

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on Which Registered</u>
<b><u>Common Shares</u></b>	<b><u>ANY</u></b>	<b><u>NASDAQ Capital Market</u></b>

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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### Item 8.01 Other Events

On July 15, 2020, Sphere 3D Corp. ("Sphere") announced that it entered into a merger agreement with Rainmaker Worldwide Inc. ("Rainmaker") pursuant to which the combined entity would develop the Water-as-a-Service business being pursued by Rainmaker (the "Merger"). The completion of the Merger is subject to the approval of the shareholders of Rainmaker and Sphere. In addition, the Merger is subject to other customary closing conditions, including, among others, (i) the declaration by the Securities and Exchange Commission ("SEC") of the effectiveness of the Registration Statement on Form S-4 to be filed with the SEC, (ii) Sphere having received all state securities authorizations necessary for the issuance of shares of Sphere's common stock, and (iii) the shares of Sphere's common stock issuable pursuant to the merger agreement shall have been approved for listing on the NASDAQ Capital Market.

On September 4, 2020, Sphere's proposed incoming Chairman, Aris Kekedjian, will present the strategic plan for the combined company post-merger at the LD Micro "LD 500" virtual investor conference (the "LD 500 Conference").

A copy of the materials to be presented at the LD 500 Conference is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

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## Item 9.01. Financial Statements and Exhibits.

### (d) Exhibits

Exhibit Number	Description
99.1	<a href="#">Materials Presented at the LD 500 Conference</a>

### No Offer or Solicitation

This communication shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which the offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the U.S. Securities Act of 1933, as amended.

### Additional Information and Where to Find It

In connection with the proposed transaction, Sphere and Rainmaker intend to file with the SEC a registration statement on Form S-4 or F-4, as applicable, which will contain an information statement of Rainmaker and a proxy statement/prospectus of Sphere (the "Proxy Statement/Prospectus"), and intend to mail the definitive proxy statement/prospectus to the Company's stockholders when available. SECURITY HOLDERS OF SPHERE AND RAINMAKER ARE URGED TO READ THE PROXY STATEMENT/PROSPECTUS, AND ANY RELATED AMENDMENTS, SUPPLEMENTS AND OTHER RELEVANT DOCUMENTS FILED WITH THE SEC CAREFULLY WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT SPHERE, RAINMAKER, THE PROPOSED TRANSACTION AND RELATED MATTERS. Security holders may obtain free copies of the Proxy Statement/Prospectus and other documents (when available) that Sphere and Rainmaker file with the SEC through the website maintained by the SEC at [www.sec.gov](http://www.sec.gov).

### Participants in the Solicitation

Sphere, Rainmaker and certain of their respective directors, executive officers and employees may be considered participants in the solicitation of proxies in connection with the proposed transaction. Information regarding the persons who may, under the rules of the SEC, be deemed participants in the solicitation of the shareholders of Rainmaker in connection with the transaction, including a description of their respective direct or indirect interests, by security holdings or otherwise, will be included in the definitive Proxy Statement/Prospectus when it is filed with the SEC. Information regarding Sphere's executive officers and directors is included in Sphere's proxy statement for its 2019 annual meeting of stockholders, which was filed with the SEC on December 6, 2019 and in Sphere's Annual Report on Form 10-K for the year ended December 31, 2019, which was filed with the SEC on May 14, 2020 and amended on May 15, 2020 ("Annual Report"). Changes in the director or indirect interests of Sphere's directors and executive officers are set forth in Forms 3, 4 and 5 as filed with the SEC. These documents are available free of charge as described above.

### Cautionary Statement Regarding Forward-Looking Statements

This communication contains "forward-looking statements" as defined in the U.S. Private Securities Litigation Reform Act of 1995. The reader is cautioned not to rely on these forward-looking statements. These statements are based on current expectations of future events and these include statements using the words such as will and expected, and similar statements. If underlying assumptions prove inaccurate or known or unknown risks or uncertainties materialize, actual results could vary materially from the expectations of Sphere. Risks and uncertainties include, but are not limited to: (i) the risk that the transaction may not be completed in a timely manner or at all, which may adversely affect Sphere's business and the price of its common stock, (ii) the failure to satisfy the conditions to the consummation of the transaction, including the adoption of the Merger Agreement by the stockholders of Rainmaker, and the receipt of certain governmental and regulatory approvals, (iii) the failure of Sphere and Merger Sub to obtain the necessary financing, (iv) the occurrence of any event, change or other circumstance that could give rise to the termination of the Merger Agreement, (v) the effect of the announcement or pendency of the transaction on Sphere's or Rainmaker's business relationships, operating results, and business generally, (vi) risks that the proposed transaction disrupts Sphere's or Rainmaker's current plans and operations, (vii) risks related to diverting management's attention from Sphere's or Rainmaker's ongoing business operations, and (viii) the outcome of any legal proceedings that may be instituted against Sphere, Rainmaker or Merger Sub related to the Merger Agreement or the transaction contemplated thereby. The foregoing list of factors is not exhaustive. You should carefully consider the foregoing factors and the other risks and uncertainties that affect the businesses of Sphere described in the "Risk Factors" section of Sphere's Annual Report and other reports and documents filed from time to time with the SEC. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and Sphere assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. Sphere does not give any assurance that it will achieve its expectations.

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: September 4, 2020

**SPHERE 3D CORP.**

By: /s/ Peter Tassiopoulos  
Name: Peter Tassiopoulos  
Title: Chief Executive Officer

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**EXHIBIT INDEX**

Form 8-K

**Exhibit  
Number**

**Description**

<a href="#">99.1</a>	<a href="#">Materials Presented at the LD 500 Conference</a>
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**Sphere3D**

# RAINMAKER

**Announced Merger**

Strategic Vision for  
Post-Merger Combined  
Company

**LD||MICRO**  
SEPTEMBER 17 - 21<sup>st</sup>  
ONLINE | THE LD 500

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## Safe Harbor Statement

This presentation contains forward-looking statements that involve risks, uncertainties, and assumptions that are difficult to predict. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of risks and uncertainties including, without limitation, our inability to obtain additional debt or equity financing; any increase in our cash needs; the Company's ability to maintain listing with the NASDAQ Capital Market; market adoption and performance of our products; the level of success of our collaborations and business partnerships; possible actions by customers, partners, suppliers, competitors or regulatory authorities; and other risks detailed from time to time in our periodic reports contained in our Annual Information Form and other filings with Canadian securities regulators ([www.sedar.com](http://www.sedar.com)) and in prior periodic reports filed with the United States Securities and Exchange Commission ([www.sec.gov](http://www.sec.gov)). Sphere 3D undertakes no obligation to update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise, except as required by law.



## Who is Rainmaker?

Rainmaker is helping to solve the global water crisis by providing *economical*, *scalable* and *environmentally sustainable* solutions through *innovative* technology.



## Leadership Team



**Aris Kekedjian**  
*Incoming Chairman, Sphere 3D*

- Former Chief Investment Officer of The General Electric Company (GE)
- 30 years of extensive experience building and operating international business
- M&A track record includes transactions with a combined enterprise value of over \$300 billion
- Extensive industry experience in Energy, Financial Services, Healthcare, Transportation, Water
- Led transactions in disruptive industries including Industrial Internet of Things (IIoT), 3D printing, renewable energy and life sciences
- Orchestrated multiple billion dollar deals:
  - Acquisition of LM Wind Power (\$1.65 billion)
  - Sale of GE Distributed Power (\$3.25 billion)
  - Merger of GE Water & Process Technologies and Suez (\$3.4 billion)



**Michael Skinner**  
*CEO, Rainmaker*

- Co-founder of Rainmaker Worldwide
- Leads the Innovation Cluster in Canadian region of Peterborough Kawartha, which supports early stage companies in the technology, cleantech, healthcare and advanced agriculture sectors.
- Serial entrepreneur who has built, operated and sold over 20 companies sectors including green energy, software, hardware technology and entertainment.
- Advisory Board Chair for the Centre for Advancement of Water and Wastewater Technologies (CAWT), an internationally recognized water and wastewater research institution.
- Founded Operitel Corporation (2001), a learning software development company acquired by OpenText Corporation, Canada's largest software company.

## Announced Merger on July 15, 2020



# RAINMAKER

- NASDAQ-listed (ANY)
- Exiting technology holding company model
- Market cap: ~\$25 million
- After merger, ANY will explore ways to liquidate its historic businesses and maximize shareholder value
- Incoming Chairman: Aris Kekedjian

- OTC-listed since 2017 (RAKR)
- Market cap: ~\$25 million
- Water-as-a-Service provider
- R&D and production in Netherlands
- CEO: Michael Skinner

### Key Terms

- i. Contingencies: B/S recap, \$15M ANY capitalization, S/H approvals
- ii. Formal ANY / RAKR reseller agreement to accelerate commercial orders (eg. Turks project)
- iii. New Management & Board by expected closing: Dec. 2020



## Why Focus on Water?

- It is estimated that by 2030 nearly half of humanity will be living in severe water stress <sup>1</sup>
- **2.2 billion people around the globe lack safe drinking water** <sup>2</sup>
- On average, high-income countries only treat 70% of wastewater, low-income countries treat 8% <sup>3</sup>
- 39% groundwater depletion rate is unsustainable <sup>4</sup>
- The world's population is growing, projected to become 9 billion by 2038 <sup>5</sup>
- # 6 of UN's 17 Sustainable Development Goals

**3 BILLION  
PEOPLE**  
AROUND THE WORLD  
**LACK BASIC  
HANDWASHING  
FACILITIES AT HOME.**<sup>2</sup>

<sup>1</sup> OECD (2008), OECD Environmental Outlook to 2030, OECD Publishing, Paris. Retrieved from: <https://doi.org/10.1787/9789264040519-en>

<sup>2</sup> Source: United Nations Children's Fund (UNICEF) and World Health Organization (WHO). (2019). Progress on household drinking water, sanitation and hygiene 2000-2017. Special focus on Inequalities. [PDF file]. Retrieved from <https://data.unicef.org/resources/progress-drinking-water-sanitation-hygiene-2019/>

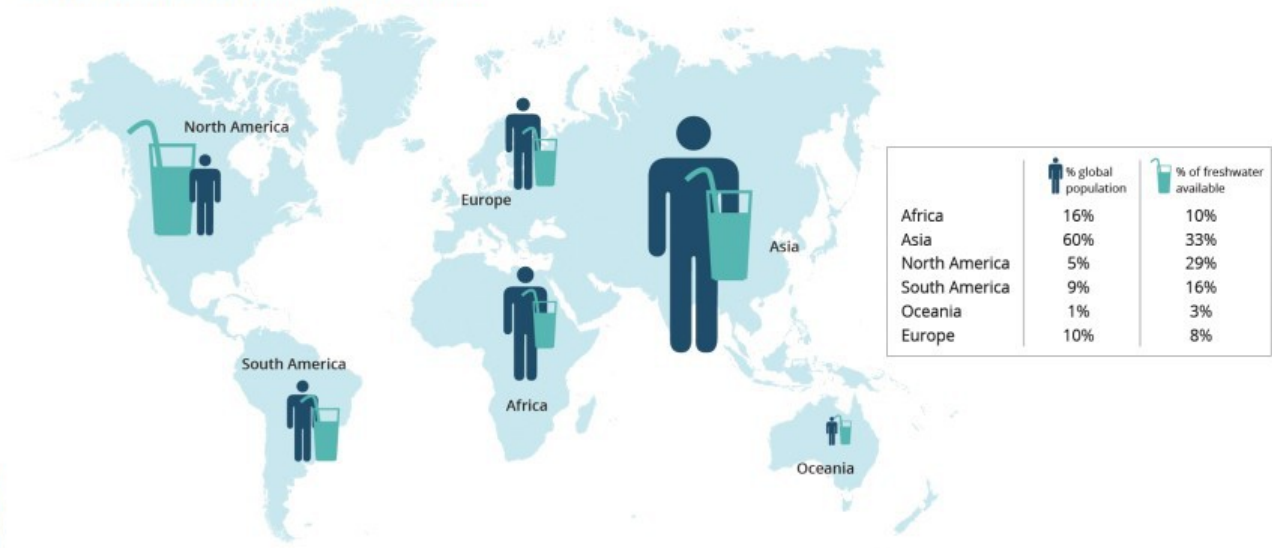
<sup>3</sup> UNESCO: The United Nations World Water Development Report 2017. Wastewater: The Untapped Resource. UNESCO 2017. <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/2017-wastewater-the-untapped-resource/>

<sup>4</sup> Citi GPS: Global Perspectives & Solutions. (2017). Solutions for the global water crisis: The end of 'free and cheap' water [PDF file]. Retrieved from <https://www.citi-velocity.com/citigps/solutions-global-water-crisis/>

<sup>5</sup> Worldometers, elaboration of data by United Nations, Department of Economic and Social Affairs, Population Division.

## The Global Water Crisis

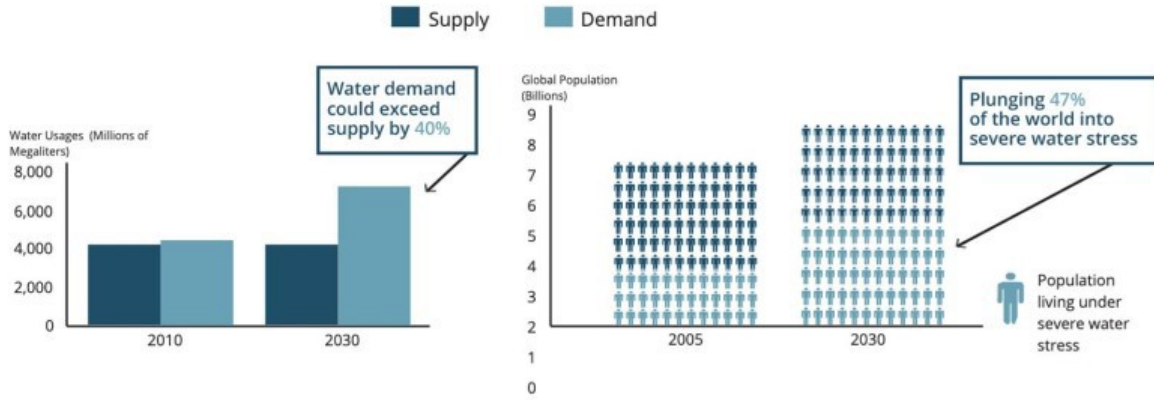
Uneven distribution of water resources



<sup>1</sup>Source: Citi GPS: Global Perspectives & Solutions. (2017). Solutions for the global water crisis: The end of 'free and cheap' water [PDF file]. Retrieved from <https://www.citiverocity.com/citigps/solutions-global-water-crisis/>

## The Global Water Crisis

Although the global water supply remains fixed, consumption is increasing.



Source: Allianz Global Investors (2017, July 20). 5 Reasons to go active with water Investing. Retrieved from: <https://us.allianzgi.com/Ven-us/advisors/insights/investment-themes/5-reasons-to-go-active-with-water-investing>

Source: OECD (2008), OECD Environmental Outlook to 2030, OECD Publishing, Paris. Retrieved from: <https://doi.org/10.1787/9789264040519-en>

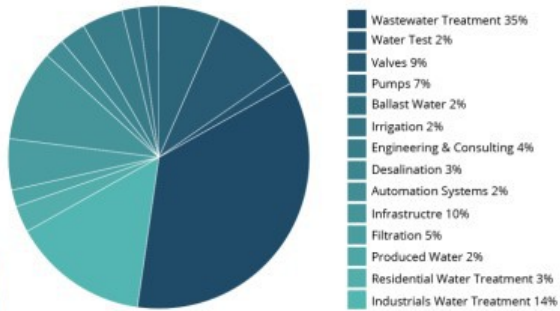


## Giant Total Addressable Market

Water demand likely to exceed supply by 40% by 2030<sup>3</sup>

\$7.5-10 Trillion required to maintain, upgrade and build global water infrastructure<sup>3</sup>

### The Global Water Market: \$620 billion<sup>1</sup>



Rainmaker solutions address 70% of \$620 billion global market today; estimated to grow to

**\$1 TRILLION BY 2025<sup>2</sup>**

<sup>1</sup> Source: UBS (2019, May 09). Longer term Investments: Water scarcity [PDF file]. Retrieved from <https://www.ubs.com/content/dam/WealthManagementAmericas/cdo-impact/water%20scarcity.pdf><sup>2</sup> Source: RobecoSAM Study (2015, June). Water: the market of the future [PDF file]. Retrieved from [https://www.robecosam.com/medialibrary/2015/2015061907694044ed76e0b063a2\\_robecosam-water-study\\_tcm1011-14997.pdf](https://www.robecosam.com/medialibrary/2015/2015061907694044ed76e0b063a2_robecosam-water-study_tcm1011-14997.pdf)<sup>3</sup> Citi GPS: Global Perspectives & Solutions. (2017). Solutions for the global water crisis: The end of 'free and cheap' water [PDF file]. Retrieved from <https://www.citivelocity.com/citigps/solutions-global-water-crisis/>

## Rainmaker Business Model: Built to Scale

### Water-as-a-Service Through Joint Venture Partnerships

- Contract JV's for particular use cases structured as 5-10 year off-take agreements. Typically 75% ownership.
- Commercial JV's targeting particular geographies or industries. Typically 50-75% ownership.

### Solutions provided through 3 main modular, networked and scalable product deployments:

- Air-to-Water solutions where scarcity, mobility and flexibility are critical. Typically competing against high cost trucking or infrastructure solutions.
- Water-to-Water solutions to address desalination, water treatment and mineral isolation opportunities. Flexible feed source application. Cost competitive with traditional RO and waste treatment options with significantly lower investment.
- Hybrid AW & WW deployments to provide integrated drinking & non-drinking water closed loop systems.



### ***Air-to-Water (AW)***

Through our Air-to-Water application, we harvest water by combining atmospheric humidity, heat and air flow.

Produces 5,000, 10,000 or 20,000 liters per unit, per day.



### ***Water-to-Water (WW)***

Through our Water-to-Water application, we transform contaminated water (saltwater, sewage, polluted) into safe, clean water.

Produces 37,500, 75,000 or 150,000 per unit, per day.



## Breadth of Global Applications & Use Cases:

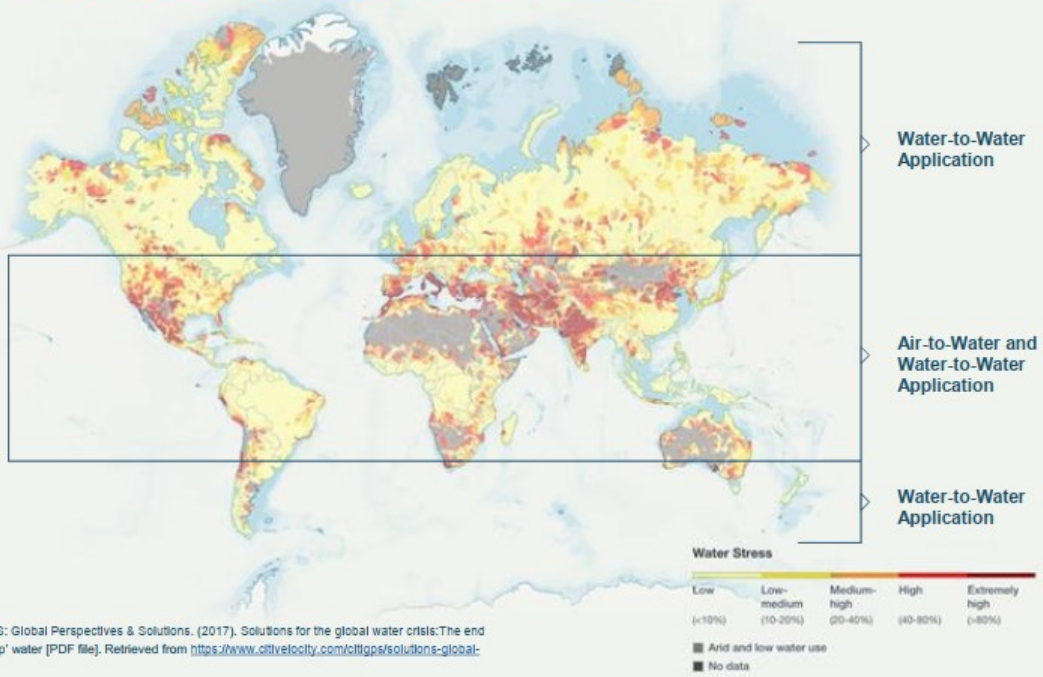
### Institutional

- **Geographic utility opportunities with inadequate water supply or infrastructure:**
  - Island nations, remote communities, Middle East, Africa, SE Asia
  - Sweet spot 500-50,000 person deployments in a networked solution
- **Municipal applications in developed countries where aging infrastructure impacts access to water quality.**
- **Military applications**
- **Government Agencies, NGO's, CSR programs, Emergency Preparedness**

### Commercial

- **Healthcare & Hospital applications**
- **Commercial Development & Tourism**
- **Agriculture**
- **Resource Extraction**
- **Food & Beverage**
- **Industrial / Factory Applications**
- **Excess renewable energy monetization**
- **By-product sales – salt, minerals, etc**

ADDRESSING ALL GEOGRAPHIES AND CLIMATES



\*Source: Citi GPS: Global Perspectives & Solutions. (2017). Solutions for the global water crisis: The end of 'free and cheap' water [PDF file]. Retrieved from <https://www.citivelocity.com/citigps/solutions-global-water-crisis/>

## Highly Scalable & Profitable Recurring Revenue Model:

- ✓ **Modular and scalable** equipment & WaaS sale eliminates upfront customer capex and shortens sales and deployment cycle
- ✓ **Turnkey deployment** with minimal infrastructure requirements
- ✓ Modest and demand-scaled capital intensity allows for **attractive project financing** and access to subsidies
- ✓ Initial **proof of concept deployments** scale exponentially
- ✓ **High cash margins** and low operating costs create compelling economics for Rainmaker and JV partners
- ✓ Typical deployment **payback < 1year**
- ✓ **Cost competitive** with traditional alternatives with lower investment and more flexibility



**Air-to-Water**

Liters Produced / Day:	4,500
Floor Price / Liter:	\$0.10
Revenue / Day (\$):	\$450
Gross Margin 75%:	\$338
Start-up/Allocated Expenses 20%:	\$90
EBITDA:	\$248 (55%)
Target Production Cost:	\$50,000

Payback Period:	6.7 Months
5-year Cash Return:	\$396,552
Investment @ 80% LTV:	\$10,000
Unit ROI:	36.7x

**Water-to-Water**

Liters Produced / Day:	35,000
Floor Price / Liter:	\$0.05
Revenue / Day (\$):	\$1,750
Gross Margin 75%:	\$1,313
Start-up/Allocated Expenses 20%:	\$350
EBITDA:	\$963 (55%)
Target Production Cost:	\$250,000

Payback Period:	8.5 Months
5-year Cash Return:	\$1,486,872
Investment @ 80% LTV:	\$50,000
Unit ROI:	26.7x

Typical JV Ownership:	Multi-year Off-take Merchant Projects	49-80% 49-75%
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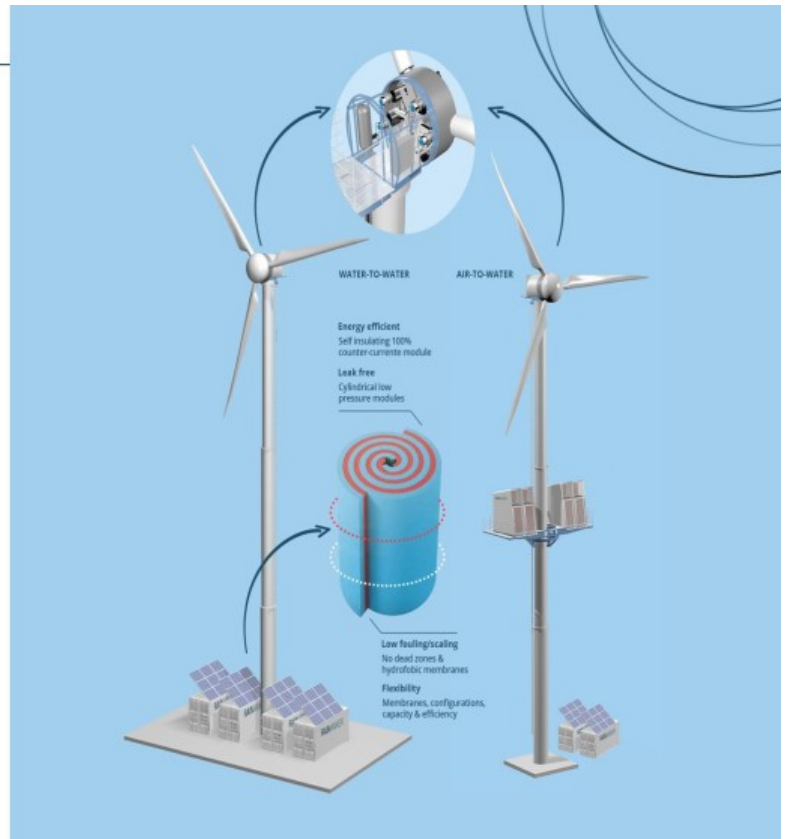
<b>JV Project</b>	<b>JV Type</b>	<b>Daily Liters @ Capacity</b>	<b>Roll-out</b>	<b>Pricing</b>	<b>JV Ownership</b>
<b>Turks &amp; Caicos</b> Commercial & Residential Development	Commercial Contract	375,000	Q1'20-Q1'24	Contract Floor = \$.08/L Retail = \$.25/L	75%
<b>Bahamas</b> Retail & Hotel Distribution	Commercial Contract	225,000	Q4'20-Q2'23	Contract Floor = \$.12/L Retail = \$.25/L	49% (100% Partner-financed)
<b>Morocco</b> Gov't remote community pilot	Contract	5,000	Q4'20	TBD based on pilot results & program negotiation	Program size & Terms TBD (Pilot is grant supported)
<b>Jamaica</b> University pilot	Contract	5,000	Q4'20	Contract Price: \$.30/L	80%
<b>Sri Lanka</b> Retail Distribution	Commercial	25,000	Q4'20-Q4'22	Retail = \$.30/L	45% (50% partner financed)

**Backlog developed within last 6 months.  
Morocco & Jamaica may represent significant scale opportunities**

# RAINMAKER

## Modern, Efficient & Sustainable Solutions

- ✓ Portable, networked & distributed solutions...rapid deployment & repositioning
- ✓ Energy agnostic, renewable power optimized... provides wide flexibility
- ✓ Chemical free, no-filter design
- ✓ Distributed footprint, flexible feed source & unique variable flow-through optimization limits environmental impact
- ✓ Innovative membrane distillation & heat waste optimization designs
- ✓ Proprietary flow & energy optimization algorithms



## Rainmaker Worldwide Inc. Wins EU Horizon 2020 Project

### *Dutch military conducts extensive testing Rainmaker technology for mission-critical deployments*

- Two-year process of due diligence by the European Union
- \$2.5 million to develop 4 Water-to-Water solution prototypes in the Canary Islands.
- Testing will be across grid, solar, wind and hybrid energy sources, including the only desalination of its kind powered 100% by renewable energy.
- Over a two-year period starting in September 2019, the program will build, install and validate the technology.
- Initial production capacity will be 80,000 liters per day.
- Membrane Distillation Water/Power Unit – Based on military specs and Bredenoord's state-of-the-art military-grade generator
- Fieldlab Smartbase 1.0 project: Next gen tech for Mission-Critical forward military bases, emergency response and disaster relief.
- Containerized solution designed for transport by ISO standard freight trucks.
- Each unit can provide up to 20,000 liters of pure drinking water and 30 kW of electricity daily under all conditions; without any power grid connection.
- Disruptive platform to displace high cost and less flexible transport and/or reverse osmosis (RO) solutions



RAINMAKER

# Rainmaker

## Water-as-a-Service

- ✓ Wide-Use Case Applications
- ✓ Scalable & Cost-Effective Solutions
- ✓ Sustainable, Social & Environmentally Progressive
- ✓ Proprietary Technology and Development Pipeline





## Investor Contact:

### The Blueshirt Group

100 Montgomery St., Suite 1600

San Francisco, CA 94104

+1 415-489-2188

[whitney@blueshirtgroup.com](mailto:whitney@blueshirtgroup.com)

   [rainmakerww.com](http://rainmakerww.com)

RAINMAKER




# Appendix

## The Global Water Crisis

**50**  **LITERS**  
**OF WATER**  
**PER PERSON**

PER DAY ARE NEEDED TO ENSURE MOST BASIC NEEDS.<sup>1</sup>



**2.2 BILLION PEOPLE**  
AROUND THE WORLD  
**LACK SAFE**   
**DRINKING WATER.**<sup>2</sup>

**4.2 BILLION PEOPLE**  
LACK SAFE SANITATION.<sup>2</sup>



**3 BILLION**  
**PEOPLE**

AROUND THE WORLD

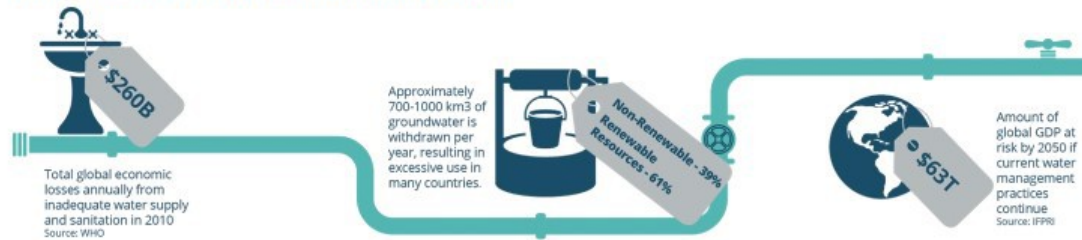
**LACK BASIC**  
**HANDWASHING**  
**FACILITIES AT HOME.**<sup>2</sup>

<sup>1</sup> Source: World Health Organization, (2017). Guidelines for drinking-water quality: Fourth edition incorporating the first addendum [PDF file]. Retrieved from <https://apps.who.int/iris/handle/10665/254637/9789241549950-eng.pdf>

<sup>2</sup> Source: United Nations Children's Fund (UNICEF) and World Health Organization (WHO). (2019). Progress on household drinking water, sanitation and hygiene 2000-2017. Special focus on Inequalities. [PDF file]. Retrieved from <https://data.unicef.org/resources/progress-drinking-water-sanitation-hygiene-2019/>

## The Global Water Crisis

Water issues create real economic issues



**RAINMAKER** Disruptive and flexible applications that are well positioned in today's world.



1

**WATER INFRASTRUCTURE**  
Investments of \$7.5 to \$9.7 trillion needed globally to upgrade, maintain and build new water infrastructure.



2

**REGULATION AND MARKET-BASED INSTRUMENTS**  
• Pricing to reflect scarcity  
• Rationing + re-use



3

**TECHNOLOGY SOLUTIONS**  
Including smart water tools (metering, big data), desalination, precision agriculture and beneficial re-use of produced water.

These Images were adapted based on the source: CII GPS: Global Perspectives & Solutions. (2017). Solutions for the global water crisis: The end of 'free and cheap' water [PDF file]. Retrieved from <https://www.citvelocity.com/citgps/solutions-global-water-crisis/>

## WATER SUPPLY

Ways to Create Clean Drinking Water

### Traditional

*Wells:* This is dependent on reaching the water table and finding a substantial quantity of drinkable water.

*Rainwater:* Viable and sustainable collection system designed to gather rainwater throughout the year; however, many regions have substantial dry seasons.

*Desalination:* Utilizes plentiful seawater, but extremely expensive for distributed water solutions and has a high level of feed water wastage

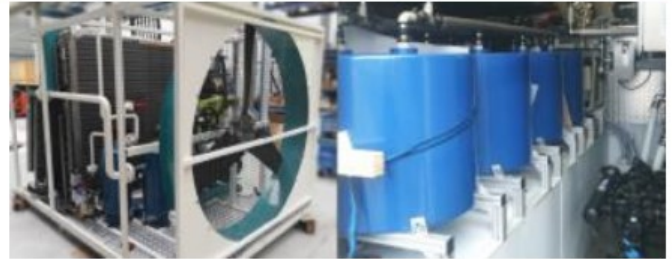


### Emerging / Disruptive

## RAINMAKER

*Convert air humidity to water:* We extract and condense moisture in the air to produce healthy, purified drinking water with our Air-to-Water application.

*Next generation treatments:* We can inexpensively transform undrinkable, contaminated and saline water into safe, clean water through our next generation Water-to-Water application with high feed water conversion efficiency.



Rainmaker Air-to-Water

Rainmaker Water-to-Water

### **Our sweet spot in the freshwater market:**

- Rainmaker occupies what we believe to be the optimum and most flexible position when it comes to size and capacity.
- The footprint is small, mobile and easily deployed so the technology can be located where the water is needed.
- Air-to-Water units are available in three sizes, producing 5,000, 10,000 or 20,000 liters of drinking water per day. Any location that meets temperature requirements (greater than 15°C / 59°F) can benefit.
- Each Water-to-Water unit produces 37,500 to 150,000 liters per day wherever there is access to seawater or polluted water.
- In both cases, we scale up simply by adding more units.



**Environmental Impacts of Large-Scale Sea Water Reverse Osmosis (SWRO)**

High volume concentrated facilities either independent of or co-located with a power production facility.

**Intakes:** Depending on the complexity of the feedwater and marine biology, the large volumes of feedwater can have significant negative impacts on marine life (impingement and entrainment).

**Outfall:** Returning highly concentrated brine together with toxic cleaning chemicals to a local marine environment can cause significant damage.

**Operating Inefficiencies:** In complex SWRO solutions, and in general, energy inefficiency will create a significant localized environmental impact. RO is highly energy intensive representing 40% of total OPEX.

**RAINMAKER**

Distributed, Networked Solutions with Continuous Flow Rate Flexibility

**Intakes:** On a small to medium scale RWI WW operates at a 90/10 ratio versus RO at 50/50 therefore requiring far less feedwater, far less energy (especially with renewable) and no impact on the localized marine environment.

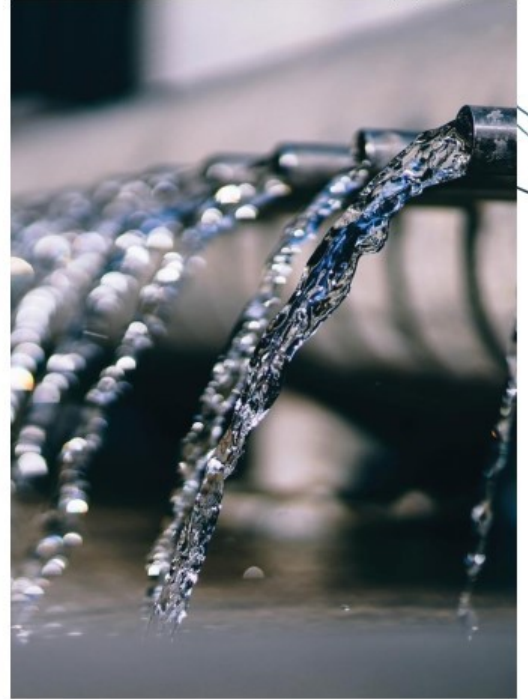
**Outfall:** Limited brine per liter of feedwater allows for alternative post-treatment options. RWI WW technology does not produce volumes of brine that impact the marine environment.

**Operating Inefficiencies:** No chemicals, no carbon footprint (with renewable energy) and limited O and M reduces environmental impact per liter significantly.

## Unique Operating Advantages of Rainmaker's Air-to-Water

- *Unique Sweet Spot of 500-50,000 population networked communities.*
- **Cost** per liter of water is lowest in the category. Design requires minimal maintenance and operational expenditure.
- **Capacity:** Produce more liters of water per day than most competitors under the same climatic and energy conditions.
- **Choice of installation sizes with networked scalability:** Four of our AW-GO25 machines will fit in a 40-foot container
- **Choice of power sources:** Wind, solar, grid or generator. Optimized for remote renewable energy operations.
- **Set-up time:** Deployment as fast as 90 days

**We are in the scale business. We do not compete in the markets for household-size units.**





## Unique Attributes of Rainmaker's Membrane Distillation WW Technology

### Operating Advantages:

- Lower operating temperatures required compared to conventional distillation.  
Operates at feed temperatures considerably lower than the boiling point of water
- Lower operating hydrostatic pressures than the pressure-driven RO processes.  
Generally near atmospheric pressure
- Compact process size that is scalable
- Material flexibility reduces cost and avoids corrosion problems
- **Unique differentiation vs current market solutions at scale less than 500m<sup>3</sup>/day**

### Environmental / Efficiency Advantages:

- Renewable energy source optimized (solar, wind, hybrid)
- More water production by volume of water input than alternatives
- 100% rejection of ions, macromolecules, colloids, biological cells and other non-volatile impurities
- Capable of treating feed water with high concentrations of pollutants or salt concentration near saturation point
- No brine disposal necessary; zero liquid waste is possible
- No highly toxic anti-fouling chemicals are necessary



**Air to Water****➤ v 2.0 Product in Q4 Deployment Phase:**

- ✓ **Q4: Complete field testing – on-site & remote diagnostics in Jamaica, Morocco & Sri Lanka**
- ✓ **H1'21: Lock final v 2.0 design outsourcing & scalable production**
- ✓ **2022: v2 prototype with +50% better water production efficiency**
- ✓ **By 2023: Run rate unit cost @ 50% of deployment units via sourcing & design strategy**

**Water to Water****➤ v 1.5 in Development Phase:**

- ✓ **2H'21 Deliver on EU sponsored \$2.3M showcase grant in Canary Islands**
- ✓ **Complete 9-month Dutch Military field test analysis in Q4**
- ✓ **Deploy initial field prototypes in Canada & N Africa in 2H'21**
- ✓ **2022: v2 with enhanced thermal & renewable energy efficiency**

***Systematic & robust technology development to date***

- IP based on 10 years of underlying technology development
- Strong connections with key Dutch & Canadian research institutes
- **Funding & Nasdaq currency provides IP acquisition firepower**

## Rainmaker Water-as-a-Service Platform

- 
- Wide-Use Case Applications:
    - ✓ Modular, portable, distributed solutions...rapid turnkey deployment & repositioning
    - ✓ Flexible, networked applications – industry, commercial, humanitarian, military
    - ✓ Energy Agnostic, Renewable power optimized...provides wide flexibility
  - Scalable & Cost-effective Solutions:
    - ✓ Cost competitive at attractive margin & payback economics
    - ✓ Capital efficient, flexible, low variable cost customer applications
    - ✓ Not reliant on local infrastructure...flexible footprint
  - Sustainable, Social & Environmentally Progressive:
    - ✓ Chemical free, no-filter design
    - ✓ Distributed footprint and unique variable flow-through optimization
    - ✓ Dual technologies address most impacted humanitarian and health situations
  - Proprietary Technology and Development Pipeline:
    - ✓ Innovative membrane distillation & heat waste optimization designs
    - ✓ Proven technologies combined with flow & energy optimization algorithms
    - ✓ Multi-input (saltwater, sewage, polluted) to medical grade water-to-water solution
    - ✓ Multi-location networking & closed-loop Air-to-Water and Water-to-Water applications