

Closing new water infrastructure contracts rapidly H2O Innovation continues winning streak

Water infrastructure is a huge business vital to our society. Clean drinking water, efficient treatment of wastewater, and water conservation and reuse are all key to our healthy survival. Understanding this President Biden's American Jobs & Infrastructure Plan (revamped as the \$1.2 trillion Bipartisan Infrastructure Framework) plans to allocate US\$111 billion for water infrastructure. The exact details are still to be finalized with a likely approval expected ("hoped for") before the Senate breaks up and leaves Washington from August 9 to September 10. This means there is a reasonable chance to see a large U.S. infrastructure package approved before August 9, 2021.

If approved one company set to be a potential beneficiary is H2O Innovation Inc. (TSXV: HEO | OTCQX: HEOFF). H2O Innovation is a complete water solutions company that provides water, wastewater, and water reuse & recycling, desalination solutions focused on design, build, service, and contract operations. H2O Innovation designs and provides state-of-the-art, custom-built and integrated water treatment solutions based on membrane filtration technology. H2O Innovation's customers include those from municipal, energy, and natural resource end users.

H2O Innovation has three divisions:

- 1. Water Technologies & Services (WTS)** – Applies membrane technologies and engineering expertise to deliver equipment and services to municipal and industrial

water, wastewater, and water reuse customers.

2. **Specialty Products (SP)** – Is a set of businesses that manufacture and supply a complete line of specialty chemicals (PWT™ and Genesys® were recently merged to form H₂O Innovation Specialty Chemicals Group.), consumables and engineered products for the global water treatment industry.
3. **Operations & Maintenance (O&M)** – Provides contract operations and associated services for water and wastewater treatment systems.

H2O Innovation's 3 business segments all targeting to create a better water infrastructure



Source: H2O Innovation company presentation

H2O Innovation continues to win new contracts at a rapid pace

Announced on June 1, 2021, H2O Innovation signed C\$4.5 million of new contracts. The news release stated: "H2O Innovation....was awarded 10 new projects over the last months,

including six industrial ones. These new contracts, totaling \$4.5 million, will bring the Corporation's Water Technologies & Services ("WTS") business pillar sales backlog to \$35.0 million."

Announced on June 23, 2021, H2O Innovation signed a new contract worth C\$5.0 million. The news reported: "H₂O Innovation Inc.... is proud to announce it has recently been awarded the Operations and Maintenance ("O&M") contract for the Town of Warren, Rhode Island with a total value of \$5.0 million, bringing the Corporation's O&M sales backlog to \$71.3 million."

H2O Innovation's financials are forecast to improve each year

H2O Innovation is targeting their niche areas with addressable markets of US\$4.5 billion out of the total water infrastructure addressable market of US\$837.5 billion.

Currently, H2O Innovations' revenue is forecast to reach C\$147 million (~US\$118 million) and a net income of C\$4 million in 2021. 2021 PE is forecast at 40.4. It is worth noting that H2O Innovation's US\$118 million in forecast revenue is just 2.6% of their US\$4.5 billion addressable market. Looking at the latest financial results from Q3 in the 2021 financial year, where net earnings amounted to C\$2.1 million (up from a net loss of C\$3.1 million YoY), H2O Innovation looks to be on track to meet or exceed the above forecast.

In 2022, H2O Innovation's net income is forecast to grow to C\$5 million and then in 2023 to reach C\$7 million, equating to a forecast 2022 PE of 32.6 and a 2023 PE of 24.6.

Given the rate of growth of new contracts and the large back orders it is looking like H2O Innovation may exceed these forecasts. Also as it stands based on the current forecasts net income is set to almost double from C\$4 million in 2021 to C\$7 million in 2023.

Closing remarks

H2O Innovation continues to win new water infrastructure contracts at a rapid pace. It certainly looks like H2O Innovation is set for some impressive growth in revenue and net profits the next 2-3 years and still has a huge potential runway of growth ahead, given they are currently only tapping 2.6% of their US\$4.5 billion addressable market. All this is before we factor in the potential from the proposed US\$111 billion for water infrastructure in the USA.

Trading on a 2021 PE of 40.4 (2023 PE of 24.6) and a market cap of C\$177 million it could still be very early days for the success story of H2O Innovation. H2O Innovation President and CEO Frédéric Dugré thinks so, as you watch on an InvestorIntel video interview here. This is developing into a strong story in what looks to be a booming sector the next few years. Stay tuned.

H2O Innovation looks set to potentially benefit from President Biden's US\$111B water infrastructure spending plan

Did you know that globally 1 in 3 people do not have access to safe drinking water? And yes, mostly in the third world; however, there are also problems in the first world. As part of U.S President Biden's American Jobs & Infrastructure Plan, he intends to allocate US\$111 billion for water

infrastructure. The Biden plan seeks to modernize aging drinking water, stormwater, and wastewater systems in the USA.

The White House Fact Sheet states:

“Across the country, pipes and treatment plants are aging and polluted drinking water is endangering public health...An estimated six to ten million homes still receive drinking water through lead pipes and service lines...President Biden’s plan will eliminate all lead pipes and service lines in our drinking water systems, improving the health of our country’s children and communities of color.”

Water treatment company H2O Innovation Inc. (TSXV: HEO | OTCQX: HEOFF) looks to be in the right place at the right time. H2O Innovation has been in the water treatment industry for over 20 years but the future has never looked so good.

H2O Innovation designs and provides state-of-the-art, custom-built and integrated water treatment solutions based on membrane filtration technology. They provide multiple water solutions in the areas of drinking water, wastewater, water reuse & recycling, desalination, and water solutions. H2O Innovation’s customers include those from municipal, energy, and natural resource end users.

A summary of H2O Innovation’s business



Source: Company presentation

H2O Innovation to grow their water reuse business

H2O Innovation is capitalizing on the momentum from the U.S plan to improve water infrastructure by developing a new digital marketing strategy that focuses on its globally recognized expertise in water reuse. The Company recently hired Alejandro Sturniolo to fulfill the role of Global Head of Water Reuse and Strategic Partnerships. Alejandro has been involved in the water industry for the past 22 years and he currently serves as Vice-President and board member for the International Desalination Association (“IDA”) and Latin American Association of Desalination and Water Reuse (“ALADYR”).

H2O Innovation continues to win new contracts and renew existing ones

On May 12 they announced: “H2O Innovation wins two new projects and renews four operation and maintenance contracts in North America. These contracts, with a total value of \$3.3

million, bring the O&M backlog to \$77.3 million.” The backlog refers to H2O Innovation’s backlog of orders for their business and highlights the strength of demand for their services.

Chief Strategy Officer of H2O Innovation, Gregory Madden, stated: “The contract renewals show a commitment to the H2O Innovation Playbook concept that we win by creating value and delighting our customers. We have great relationship with our customers which is shown in our industry leading contract renewal rates. In Western Canada, we started with our first O&M contract in the region only three years ago, and we are now operating more than 15 facilities.”

H2O Innovation is expanding in Latin America

In news released on May 3, 2021, H2O Innovation announced that in addition to their acquisition of Genesys Membrane Products, which added an office for the Corporation in Santiago, Chile; H2O Innovation plans to strengthen existing and generate new relationships with original equipment manufacturers in Latin America, a high growth potential market. Their subsidiary, Piedmont, has recently signed Pavax as a new distributor in Brazil, and now has over 20 distributors in Latin America.

Growing revenues, margins, and profits

H2O Innovation’s combined strategy of acquisition and organic growth has resulted in a steady increase in revenues over the past years, to the point where they are forecast to be profitable in 2021. Net profits are forecast to reach C\$4 million in 2021 (on C\$147 million revenue, 3.03% net margin), C\$5 million in 2022 (on C\$156 million revenue, 3.42% net margin), and C\$7 million in 2023 (on C\$167 million revenue, 4.47% net margin). This equates to a forecast 2021 PE of 43.5 and a 2022 PE of 35.1.

Looking at the latest financial results from Q3 in the 2021 financial year, where net earnings amounted to C\$2.1 million

(up from a net loss of C\$3.1 million YoY), H20 Innovation looks to be on track to exceed the above forecasts. Another nice bonus was that net debt fell to C\$3.3 million at the end of the quarter, compared to a net debt of C\$10.5 million as at June 30, 2020.

H20 Innovation President & CEO Frédéric Dugré stated: “Once again we are extremely proud to present a strong financial performance for our Q3 results. The sustained free cash generated from our operations combined with constant margin improvement testifies to the work of the last months, even years.”

Closing remarks

H20 Innovation has been successfully growing their business to the point where the company reached profitability last quarter and has also dramatically reduced their debt. Additionally, the company has a huge order backlog of business and rising recurring revenues. A great achievement. Not surprisingly the stock price is up 147% over the past year.

Looking ahead the outlook continues to brighten, notably more so if the Congress passes President Biden’s American Jobs & Infrastructure Plan (containing the water infrastructure US\$111 billion plan). H20 Innovation’s expansion into Latin America should potentially be another winner.

H20 Innovation trades on a market cap of C\$192 million. A great company and having a great year.

Appendix

President Biden’s plan to ensure clean water and to upgrade wastewater and support clean water infrastructure

Ensure clean, safe drinking water is a right in all communities:

Across the country, pipes and treatment plants are aging and polluted drinking water is endangering public health. An estimated six to ten million homes still receive drinking water through lead pipes and service lines. The President's investments in improving water infrastructure and replacing lead service lines will create good jobs, including union and prevailing wage jobs. President Biden's plan invests \$111 billion to:

- **Replace 100 percent of the nation's lead pipes and service lines.** According to the CDC, there is no safe level of lead exposure for children. Lead can slow development and cause learning, behavior, and hearing problems in children, as well as lasting kidney and brain damage. President Biden believes that no American family should still be receiving drinking water through lead pipes and service lines. To eliminate all lead pipes and service lines in the country, he is calling on Congress to invest \$45 billion in the Environmental Protection Agency's Drinking Water State Revolving Fund and in Water Infrastructure Improvements for the Nation Act (WIIN) grants. In addition to reducing lead exposure in homes, this investment also will reduce lead exposure in 400,000 schools and childcare facilities.
- **Upgrade and modernize America's drinking water, wastewater, and stormwater systems, tackle new contaminants, and support clean water infrastructure across rural America.** Aging water systems threaten public health in thousands of communities nationwide. President Biden will modernize these systems by scaling up existing, successful programs, including by providing \$56 billion in grants and low-cost flexible loans to states, Tribes, territories, and disadvantaged communities across the country. President Biden's plan also provides \$10 billion in funding to monitor and remediate PFAS (per- and polyfluoroalkyl substances) in drinking water and to invest in rural small water systems and household well and wastewater systems, including drainage fields.

Source: White House Fact Sheet

H2O Innovation awarded more contracts on the heels of record FY2020 fourth quarter results

In a news just released last week H2O Innovation Inc.'s (TSXV: HEO | OTCQX: HEOFF) ('H₂O Innovation') subsidiary, Utility

Partners, was awarded a new 3 year operation and maintenance ('O&M') contract in Florida and a 1 year renewal of an existing contract in New York State. Equally as significant is that these contracts, with a total value of C\$5.1m, bring the O&M backlog to C\$84.9m. That's a rather impressive sign of demand, especially relative to the size of H₂O Innovation, which achieved C\$133.6 million in FY 2020 revenue.

Utility Partners is US-based and specializes in the operation of water and wastewater plants operating more than 200 utilities in two Canadian provinces and twelve US states, for all of its municipal customers. H₂O Innovation acquired Utility Partners in 2016 for C\$22.5m. Over the years H₂O Innovation has delivered more than 15 membrane filtration projects to Florida, but this is the very first O&M contract. Utility Partners services include operations, maintenance, and management of public works, water, wastewater, and utility billing systems. On December 1, 2020, Utility Partners will change name to H₂O Innovation. Although the name of the operator will change, the organization and staff will remain the same.

VP of Operations Bill Douglass said:

"We are very proud to have been awarded this major contract in Florida. In addition to entering a new territory, we will also be able to take advantage of **cross-selling opportunities and synergies** with the projects carried out in this State, by H₂O Innovation, over the past few years."

H₂O Innovation specializes in all types of water treatment with a focus on North America



DRINKING WATER

Our drinking water processes stand out, in part, with the use of our innovative membrane technology. Our solutions include ultrafiltration, nanofiltration and reverse osmosis, among others.



WASTEWATER

H₂O Innovation offers the latest in wastewater treatment technologies. Our patented technologies can minimize energy consumption and reduce plant footprints. They are also highly customizable and adapt to the specific needs of each client.



WATER REUSE & RECYCLING

Our ability to innovate and adapt to any scenario makes us capable of developing water reuse systems for small and large-scale installations.

Source

And who is H₂O Innovation Inc.? H₂O Innovation designs and provides state-of-the-art, custom-built and integrated water treatment solutions based on membrane filtration technology. H₂O Innovation provides multiple water solutions in the areas of drinking water, wastewater, water reuse and recycling, desalination, and water solutions for the oil & gas industry.

H₂O Innovation's financials and forecast financials



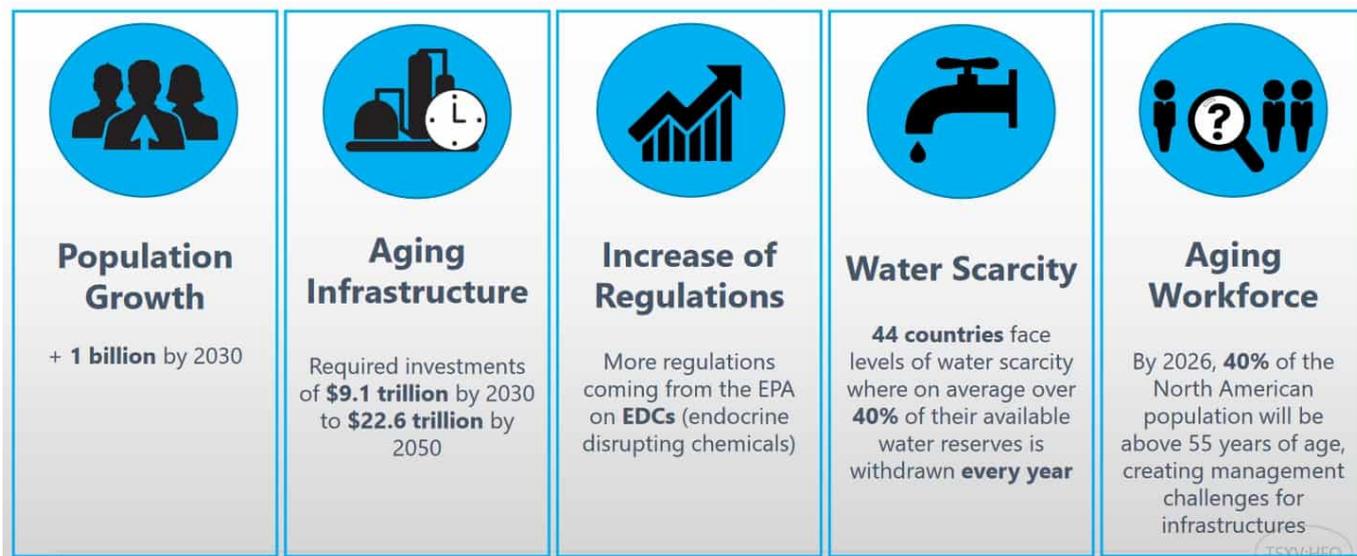
Source

As we all know water, food and air are our three most valuable commodities. Water in particular is in short supply in many countries and regions around the world. This means H₂O Innovation has plenty of runway for potential growth ahead.

The world has an ever growing demand for clean water

Water Investment Thesis

The United Nations estimates that water use is currently six times greater than it was in 1900 and that demand will increase an additional 20% to 30% by 2050.



Source

The company's just released results for fiscal 2020 (June 30 year-end) showed significant revenue growth, with "top-line revenue of \$133.6 million was up more than \$15 million from \$118 million the previous fiscal year." H₂O Innovation offers cleantech and technology driven investors exposure to the growing water treatment sector.

Dugré on H2O Innovation

FY2020 Results, \$133.6M in Revenue and a 20th Anniversary

InvestorIntel's Peter Clausi speaks with Frédéric Dugré, President and CEO of H2O Innovation Inc. (TSXV: HEO | OTCQX: HE0FF), about H2O Innovation's record FY2020 fourth quarter results.

In an InvestorIntel interview that can also be viewed on our InvestorIntel YouTube channel, Peter and Frédéric discussed H2O Innovation's recently announced financial results which reported \$133.6 million in revenues. "85% of our sales rely on recurring revenues," Frédéric explains, and with a backlog of orders at \$125 million, he said it adds "predictability to our business." He also explains the unique aspects of the company's business model that have allowed it to navigate through the COVID-19 crisis in a "remarkable way" and have helped strengthen its balance sheet through acquisitions and organic growth.

To watch this interview, [click here](#)

To learn more about H2O Innovation Inc., [click here](#)

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Dr Ian Flint on the 'real'

graphene market

Dr. Ian Flint in an interview with InvestorIntel's Tracy Weslosky discusses what is 'real' in the graphene market. Debunking many of the myths related to graphene usage, he explains that the space elevator discussion, while doable is at least a hundred years away from fruition. He said that though graphene has the potential to help construct space elevators or make fighter jets undetectable by radars, we currently do not have the technology to achieve these goals. Ian also talked about some of the exciting applications that are real for graphene currently and highlights what investors should be reviewing. He discusses graphene membranes, for instance as surface coatings because of graphene's heat and electric conductivity properties and as an additive in various composites. He claims used for water desalination will be ready for commercialization in the next year.

To access the complete interview, [click here](#)

Graphene for Water Treatment

If you find yourself in Manchester, UK, the Museum of Science and Industry is well worth a visit. It has a whole gallery devoted to graphene. In that gallery you'll see exhibits from the continuing story of graphene. One of these is a simple filter. It looks like a fairly ordinary piece of filter paper, but is worth closer inspection, read on...

It starts with a filter

These ordinary looking small white filter samples are coated in graphene oxide.



Image courtesy of G20 Water Technologies Ltd

The coated filters can separate salt and oil from water and were made by a start up company called G20 Water Technologies Ltd. founded by the equally remarkable Tim Harper, a serial high tech entrepreneur.

So, why did these filters attract my attention? Well, this product is an exercise in pragmatism. The filter membrane samples you can see in the image are a set of perfectly ordinary polyamide filters, except for the fact that they are coated in graphene oxide. They look slightly different, the colour difference is due to the degree of oxidation of the graphene coating. Graphene is black and the more it is oxidised the lighter and more yellow the material becomes.

G20 has a granted patent “Ultrathin, molecular-sieving graphene oxide membranes for separations along with their methods of formation and use” Because the coating method is straightforward this means they also have a scalable manufacturing process. This coating enhances its properties in a number of ways. Let’s look at treating water contaminated with oil.

Taking oil from troubled waters

Everyone knows that oil and water don’t mix. Well that is not quite true. Get the oil droplets small enough and they form something called an emulsion and this is surprisingly hard to separate. A familiar example is milk, which is an emulsion of fatty droplets in water.

The standard polyamide filters have a good initial performance for separating oil and water emulsions but this declines with time because the filter becomes blocked at the surface. This is called fouling and this paper describes the problem.

What G20 have discovered is that coating the surface of the filter with graphene oxide reduces this fouling problem making the filter perform better for longer. The graphene oxide coating allows water to pass through but prevents the oil. As further oil droplets accumulate on the filter they normally block it. The graphene oxide coating makes the oil droplets coalesce forming bigger drops, which float away from the filter and rise to the surface of the water. This makes the oil easier to remove and also improves the performance of the filter.

The market

Oil in water emulsions are a problem for industry. Everything from the obvious oil and gas industry to food processing and car washes have to deal with the problem of separating oil from water. The global market segment is called industrial water treatment and is worth \$146.81 Billion in 2016 with a growth rate of 5.4% in 2016. Within this is a sub market segment of industrial water and wastewater treatment that is estimated to be worth \$26.77 Billion with a growth rate of 5.8%.

More than oil in water

G20 have found that graphene oxide coatings can improve the performance of a wide range of other membranes used in the water treatment sector. They can prove a four-fold increase in the membrane operation times of Polyether Sulphone (PES) membranes that are used in bioreactors for wastewater treatment.

All this work would be impressive enough, but the company has also found that their graphene oxide coating can improve the performance of desalination membranes. The graphene oxide coating improves the permeability of pure water through the membrane while increasing salt rejection.

Why this is important

What this all means is that G20 has developed a scalable method for coating graphene oxide on to standard filter media. The coating improves the performance of water treatment filters. This enhances the performance of the filter and potentially reduces the costs of operation too. Waste water treatment is a large global market, measured in the \$Billions, with a growth rate over 5%. We'll continue our watch on graphene activity in this sector in general and G20 in particular.

Could water become the next exchange traded commodity?

It is widely accepted that around 25% of the world's population already lack adequate water for drinking and sanitation.

In terms of the metrics, around 66,245 cubic metres of water is consumed every second. This compares to a mere 155 cubic metres of oil consumed per second. Moreover, if we consider the UK alone, the amount of water consumed per capita per day has been growing at 1% per annum every year since 1930 and this trend is not only showing no sign of abating but is echoed across the majority of first world nations.

By 2000, the available fresh water available per capita was around 7,800 cubic metres. This compares to 9,000 cubic metres in 1989. We have spent vast resources trying to find alternatives to oil, yet there appear no known substitutes for water.

As the global population is expected to reach 8bn by 2025, the available fresh water per capita is expected to fall to 5,100 cubic metres. While there has been technology to try and desalinate water, no technological innovation can replace this precious commodity.

Given these statistics, is it such a leap to assume that with a finite supply, increased demand for water could send prices for the commodity soaring. We have witnessed oil shocks- could we be headed for a water shock?



Desalination has been offered as a potential solution and it is true that in the last fifteen years, costs have declined by around 60%. It is however a highly energy intensive process, which going forward will play into a higher future marginal cost of water.

Currently there are 11,000 desalination facilities in 120 countries around the globe, but collectively these only meet around 0.26% of world demand.

Certain economies including Kuwait, Malta, Netherlands, Bahrain and Belgium fulfil more than 80% of their water requirements with imports. Currently these deals are concluded between governments, behind closed doors.

Moreover, in developed countries, a 20% leak loss is accepted as the norm. In the UK, the four largest desalination facilities lose a combined 200 litres of water per customer per day. As such, as with most commodities, we have what we coin a structural deficit, namely an abundance of water in some parts of the globe that could therefore be content with losing water and a dearth of water in other parts. There is no doubt that water will need to be traded on a large scale. However, without known the water price and expected future value, we cannot begin to develop, plan and finance

infrastructure and pipelines on a true commercial scale.



Clive Murray, owner of the World Water Exchange (WWX) believes that a water exchange facilitating a water spot index for Raw, Processed and Grey water grades is needed in every appropriate country to ensure transparency around water prices and enable trade between countries. Clive believes that only when prices are transparent can companies begin to commercially invest in water infrastructure and spread the commodity more equitably.

While an ad-hoc, bi-lateral trade in physical water exists already, the volume traded is only a fraction of the overall market and what is needed to spread the resource fairly.

As such, Murray believes that a World Water Exchange is the catalyst in the democratization of water and the creation of a modern water trade.