

**SIGNINA CAPITAL AG**

**WATER INFRASTRUCTURE  
QUARTERLY REPORT – Q1 2022**



### **Waste Water, Mt. Holly, NJ**

A New Jersey based Wastewater Treatment Plant where original funds were partly used to mount solar panels to increase energy efficiency of the plant, lower costs over time, and provide energy to the local municipality. The state of New Jersey requires electricity suppliers to secure a portion of their electricity from solar facilities located in NJ, creating a natural market for Solar Renewable Energy Credit (SREC) trading credits. The project not only reduces the plant's energy consumption but also improves its overall efficiency. We can surely extend our reach in this area and currently look at a broader investment opportunity in the same sector.

### **Sustainable Sewerage, Ontario**

The Sustainable Sewerage market in Ontario currently undergoes a significant change when it comes to consolidation and strong demand for renewal of existing plants. Amongst others we are working with a public company which has developed a technology providing sewage collection and water treatment. It offers an all-in-one solution which is both cheaper to install and operate than traditional systems. The existing projects are all government linked and work closely with municipalities and we are currently working towards a PPP pipeline for its sewerage system. The provincial regulations regarding sewerage mean that many municipalities are required to change/install systems in the coming years. We have been implementing the first parts of the portfolio of existing projects and we will continue to implement more under the same framework. The constant diversification increased the security for the investors but also allows us to further reach into this market. The investment model has not changed, but the reach within Ontario has become broader.

### **Industrial Re-use, Blue Planet, California**

The project is a carbon capture and mineralization project based in Pittsburg, CA. The company captures both wastewater and CO<sub>2</sub> emitted from a gas-fired power plant and combines these with locally sourced demolished/returned concrete as a process input material to produce several different "CO<sub>2</sub> sequestered" and "up-cycled" aggregate products for use by Bay Area businesses, governments and consumers in a wide range of low-carbon, high-value concrete mix designs. The wastewater and steam is obtained from the local power plant and the ammonia needed from their treatment plant is located adjacent to the plant. As a result, either method will use recycled water, which is legislatively supported in California. The whole process revolves around reusable and recyclable products. The carbon dioxide mitigation, waste water usage and demolished concrete process input provide a process producing recycled aggregates while reducing carbon dioxide.

The company is in its last stage of raising a mix of debt and equity, before reaching commercial viability in 2023. We are involved in the last debt round, but also on the equity side for bespoke advisory clients.

### **Hydropower, Marseilles, Illinois**

A lock and dam hydroelectric water power project located on the Illinois River. The site has obtained a FERC License (expires 2061) and is finalising development. Once the site is connected and producing energy it will provide power to the local municipalities and income will be generated by the power purchase agreement in place.

### **Hydropower, Braddock, Pennsylvania**

A lock and dam hydroelectric water power project located on the Monongahela River, Pittsburgh. The site has obtained a FERC License (No. P-13739) with a 5.25MW capacity and is finalising development. The site, once producing energy will provide power to the local area with income being generated via the sale of the energy.

## **CURRENT PROJECTS**

2022 has started where 2021 left off, a lot of emphasis on Global Climate Change. The main headlines in Q1 have been the energy crisis and the war in Ukraine. Both of which show the delicate nature of the current energy environment and the steps needed to obtain a more carbon neutral world. Our projects have been operating as expected. Hydro looks to be a theme in the coming years along with the industrial re-use of Blue Planet. We have also been looking at Greenhouses which grow fresh produce in a lower energy and water environment due to being able to regulate the conditions. The research is compelling from a product and green perspective. On the greenhouse side, progress is quick and we expect to be invested within Q2 and Q3. Current advisory clients are seeking exclusivity over the first 2-3 plants and we are at final negotiation rounds. 2022 looks to have a potentially large pipeline following the slow last couple of years.

In general we notice that water infrastructure still takes a back step in priority when crises hit. Nevertheless existing clients see us as the least of their problems during emergencies and we are trying to be supportive during those times.

We will issue our 2022 ESG report in June, already featuring our new investment in greenhouses and updating on the latest developments from a purely practical point of view.

## REGIONAL MARKET INFORMATION

### NEWS IN BRIEF

#### **90,000 Dams In America: Just 2,500 Produce Hydropower.**

<https://oilprice.com/Energy/Energy-General/90000-Dams-In-America-Just-2500-Produce-Hydropower.html>

#### **Nature-Enhancing Solutions Are The Key To Solving The Climate Crisis.**

<https://www.forbes.com/sites/erikkobayashisolomon/2022/03/11/nature-enhancing-solutions-are-the-key-to-solving-the-climate-crisis/?sh=7fde74836555>

#### **Local Bounti Cracks the Code on Profitable Indoor Farming.**

<https://finance.yahoo.com/news/local-bounti-cracks-code-profitable-134741102.html>

### **CARBONISING MONEY FOR WATER<sup>1</sup>**

*Publisher Christopher Gasson asks how climate finance can work for water.*

One of the highlights of this year's Global Water Summit is a workshop on Monetising Carbon for SDG6 Finance. The idea is that there is a huge opportunity for water finance in emerging markets by making the connection with climate change.

**Water offers rich opportunities for emissions reductions, and it is unavoidable when thinking about adaptation.**

## **The trick is to ride the wave of interest in climate change to deliver the Sustainable Development Goals for water and sanitation.**

A conversation earlier this month with Joel Kolker – who is one of the industry's great thinkers, and who runs the Global Water Security and Sanitation Partnership for the World Bank – made me think twice about this concept. He pointed out that with or without climate change, we still have to find ways of addressing the three basic challenges of water finance:

### **1) Mending the leaking bucket.**

That means building utilities which have the capacity to use money effectively to deliver SDG6. Donors and lenders don't want to waste their money on chronically lossmaking utilities.

### **2) Building institutions and governance.**

Water investors have to be able to take a long-term view. They can't depend on the personality of an effective utility leader and the momentary support of politicians for their returns. Success needs to be institutionalised and protected by governance.

### **3) Managing currency risk.**

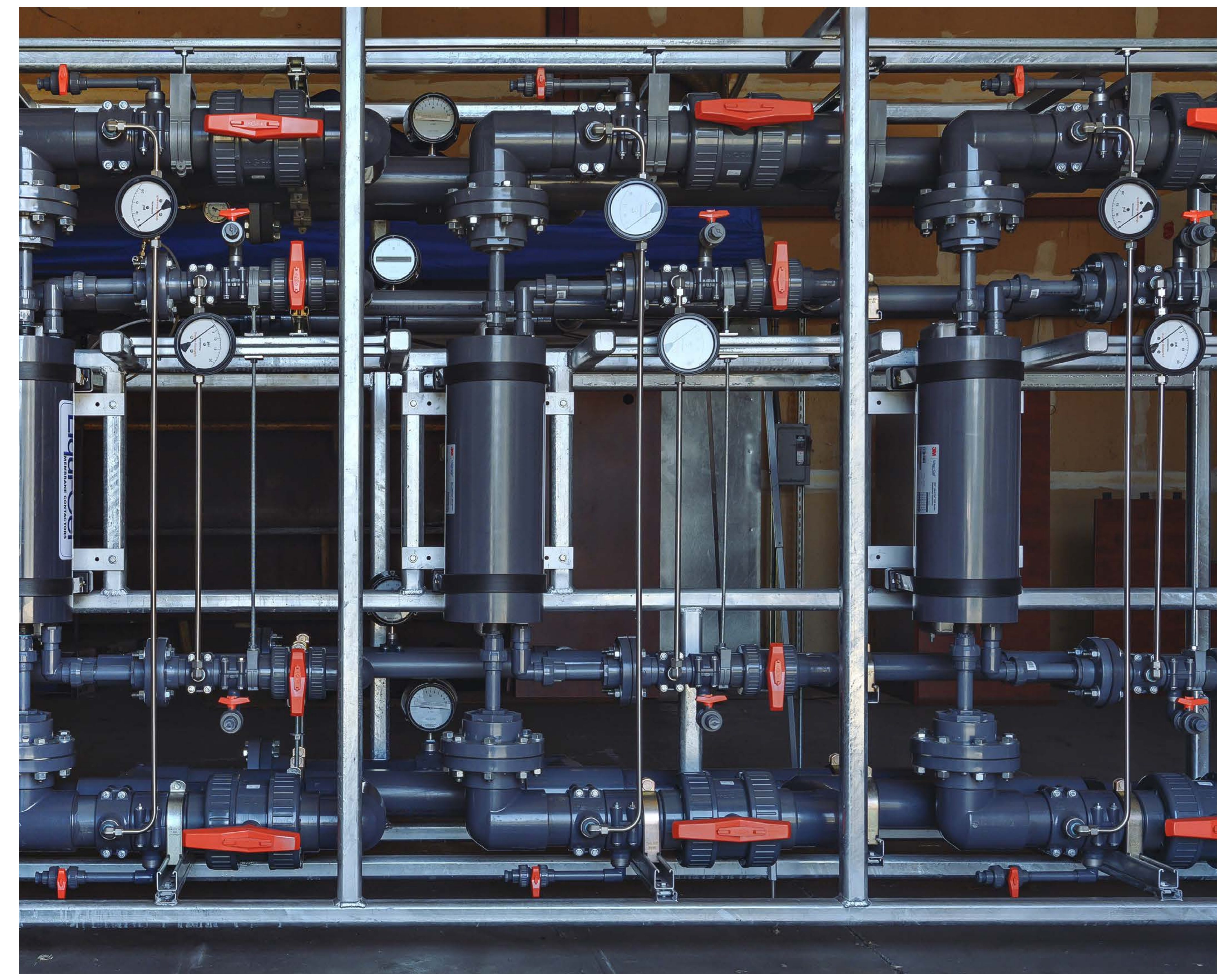
Most of the money that wants to fix climate change is in dollars or euros. Most of the opportunities to fix SDG6 can only pay returns in local currencies. This adds a level of risk for investors which cannot easily be compensated for by higher returns, because water needs to be affordable.

Kolker's point is that it doesn't matter how attractive the connection between water and climate is, unless we can make water a better place to deploy capital, the connection is useless. Furthermore, he points out, the connection between water and climate is much bigger than the utility sector. If we look at water in agriculture, it also has a big role in climate change mitigation. It is estimated that 2% of global emissions are related to the way that rice is irrigated in paddies. It releases a lot of methane and nitrous oxide, and it is also a very inefficient way of using water. The bigger picture is that integrated water resources management and climate action go hand in hand. The problem is that the agricultural water sector is even more fragmented than the urban water sector. It is this fragmentation that lies behind the three big obstacles to water finance.

Nevertheless, private money still seems to be pouring into the water-climate space. My best estimate is that over the past 18 months, \$1 billion has been raised into impact funds relating to water and climate. Over the next 18 months I expect that figure to rise to \$5 billion (on the basis of funds which are currently being raised). The problem is that all of this money is likely to be carbonised (i.e. turned into ashes) if it doesn't get involved in efforts to address the three obstacles to financing water.

Back in the 1990s when the last big wave of private money washed into water infrastructure in emerging markets, it was led by the European private water utilities. They saw it as a good means of recycling their mature cashflows into high-growth markets. They were good at fixing the leaking bucket, but they didn't address the other two challenges. In the end, their investment was largely washed out by currency devaluations and related institutional and governance problems.

This time around, the impact funds looking to address SDG6 and the climate crisis just have money to offer. It makes it all the more important that they engage with initiatives that help address the three obstacles. The World Bank has one called Utilities of the Future. Germany's GIZ and KfW have developed one called the Urban Water Catalyst Fund. The ultimate objective is to create a bigger pipeline of bankable deals. The idea is to find ways in which utility collaboration can help fix the leaking bucket.



## **CEMENT, CONCRETE, BLUE PLANET, AND CLIMATE CHANGE: TAKING LEMONS AND MAKING LEMONADE<sup>2</sup>**

**The production of cement and concrete has been, and continues to be, a major contributor to anthropogenic climate change. This is important because on a global basis, the industry that produces cement and concrete generates between 7 - 8% of annual carbon dioxide emissions.**

Below are some of the key points made by Blue Planet's CEO Brent Constanz in a recent presentation:

Human activities emit approximately 40 gigatonnes (Gt), or 40 billion metric tons, of carbon dioxide per year into the Earth's atmosphere. A metric ton (tonne) is 10% greater than a standard ton (2000 lbs.). By way of comparison, approximately 30 Gt of concrete are poured each year.

Concrete is basically a mixture of cement, sand, and gravel, with cement being the agent that binds the sand and gravel together. The combination of sand and gravel is called "aggregate," and it comprises about 80% of concrete. This 80% amounts to 24 Gt in weight; and because 44% of aggregate consists of carbon dioxide, concrete production roughly entails 10.5 Gt of carbon dioxide, a very large amount.

Globally, asphalt has about the same carbon dioxide content as concrete, and so the two together contain just over 20Gt of carbon dioxide. Instead of being emitted into the atmosphere, plausibly, this 20 Gt of carbon dioxide can be sequestered at the Earth's surface. Remember: 20Gt is about half of current annual emissions of CO<sub>2</sub>.

Blue Planet System's idea is to capture carbon dioxide emissions from power plants and other sources, and use the CO<sub>2</sub> to manufacture the aggregate which goes into making concrete. If successful, the firm claims that the end result is a double win: first, carbon dioxide from the production of energy is diverted from being emitted into the atmosphere, and is instead sequestered; and second, the synthetic aggregate results in reduced emissions that would have been associated with the production of cement and concrete by conventional means.



As for the cement, Brent Constantz has pioneered a way to manufacture cement which mimics the way that corals build reefs. Cement and coral reefs are both limestone, and therefore the issue involves how to make limestone in a way that does not produce large emissions of carbon dioxide. Thus far, corals do it successfully, and humans do not. Limestone is calcium carbonate, which can be produced as a chemical combination of carbon dioxide, oxygen, and calcium.

**Constantz likes to point out that over 99.9% of all carbon on Earth resides in the limestone making up coral reefs, with the residual 0.1% residing in the atmosphere, non-reef component of the oceans, and biosphere.**

**Think about what happens if the Blue Planet pilot plant in Pittsburg succeeds:**

- Success entails successfully capturing carbon dioxide from a Calpine natural gas fired power plant which provides electricity to San Francisco.
- Success entails being located at a deep water port, where large amounts of raw material, mostly old concrete, can be economically brought into the Blue Planet plant and treated to extract calcium.
- Success entails transporting the carbon dioxide from the power plant to Blue Planet's pilot plant, so that the carbon dioxide can be mixed with water and calcium to produce synthetic limestone aggregate.

- Success entails using the deep water port facility to transport finished aggregate to end use customers, mostly by water which reduces transportation costs.
- Success entails doing all of this profitably, as a regular business where the activity of carbon capture and sequestration pays for itself.
- Success entails doing all of these things while being carbon negative, meaning taking into account the emissions associated with all of the energy required to conduct its business, Blue Planet prevents significantly more carbon dioxide from entering the atmosphere than it adds from its activities.



The power plant in Pittsburg produces 2 million tonnes of carbon dioxide per year. Relative to potential, and the need to address the magnitude of climate change, this is a small amount. In this regard, Constantz contends that Blue Planet's technology is scalable within a short time frame, by which he means five years, from start of permitting to having an operating plant which is fully operational.

With any new technology, there is a lot of risk; and Blue Planet's technology is no different. With this in mind, there is also reason to be cautiously hopeful. Planes, cars, and trucks now drive along cement and concrete produced by Constantz's ventures, concrete which can be found in California's main coastal highway and also at San Francisco International Airport.

In addition to the question of whether the technology works, which it does, there is a second reason to be cautiously optimistic. Blue Planet Systems produces a product with economic value, which holds the promise of generating a reasonable return to investors.

Significantly, Blue Planet's business model does not depend on the receipt of government subsidies funded by taxes. The main role of government is instead procurement: purchasing "clean" concrete for infrastructure projects. In this respect, think globally. Think about regions on the planet where infrastructure has been decimated by war, and where infrastructure in need of being rebuilt. Tragically, these regions come easily to mind, such as Ukraine.

Blue Planet Systems is a company to watch. Climate change is a controversial topic, and readers will react in different ways to ventures such as this one. Some readers might think the whole idea behind Blue Planet is pie in the sky, and that human life on the planet is already doomed. Others might resent that companies such as Blue Planet will profit from climate change.

Still others are concerned about moral hazard, that if companies like Blue Planet are successful, then emitters will feel more comfortable increasing greenhouse gas emissions into the atmosphere.

## **Investors take note. When it comes to climate change, the stakes are large; and so is the potential upside associated with Blue Planet's technology.**

There are global enterprises watching with great interest to see what happens in Pittsburg. If the pilot plant is a success, there is good reason to expect them to form partnerships with Blue Planet, which will enable rapid scaling.

The IPCC continually reminds us that what gets done on the climate front during the current decade is crucial. Constantz is impatient. He has a plan in place to scale up his firm dramatically before 2030.



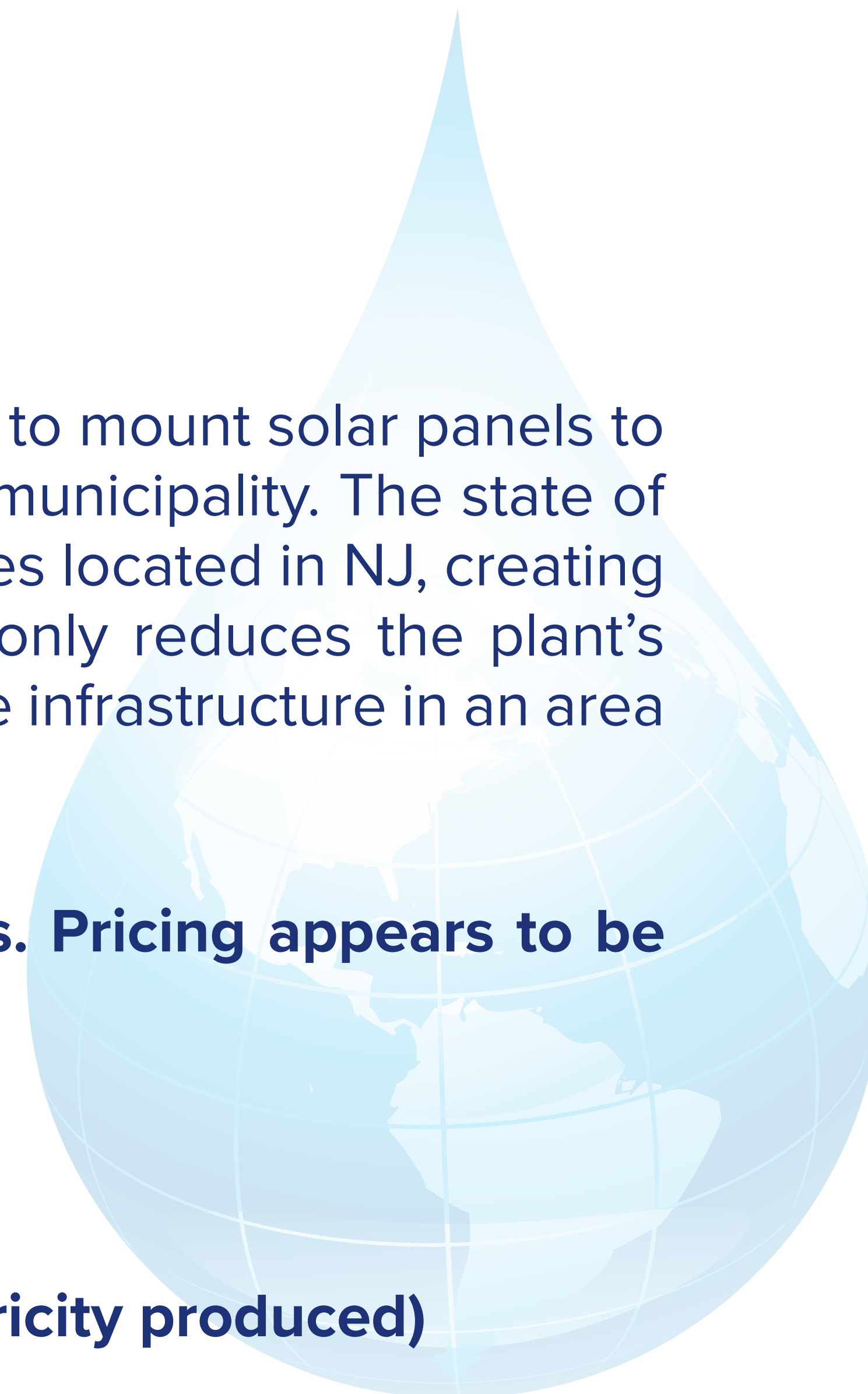


# WASTE WATER | MT. HOLLY, NEW JERSEY

A **New Jersey-based Wastewater Treatment Facility (WWTF)** where funds were partially used to mount solar panels to increase energy efficiency of the plant, lower costs over time, and provide energy to the local municipality. The state of New Jersey requires electricity suppliers to secure a portion of their electricity from solar facilities located in NJ, creating a natural market for Solar Renewable Energy Credit (SREC) trading credits. The project not only reduces the plant's energy consumption but also improves its overall efficiency. It also helped in 2010 to improve the infrastructure in an area that was hard hit during the financial crises.

The site continues to operate and provide energy with the usual stronger summer months. Pricing appears to be stable.

- Monitor PPA component
- Monitor SREC eligibility and prices on the market (1 SREC for every 1000kW-hours of electricity produced)
- Monitor regulatory shifts in clean energy incentive programs (RPS) and timelines
- Document any changes to the investment expectations
- Online monitoring of the solar power as well



- ✓ Accounts in balance
- ✓ SREC prices stable
- ✓ Incoming receivables within range of model
- ✓ Costs within range of model
- ✓ Meets target return of 7-9%

UN SDG	ICMA CRITERIA	ESG POLICY SOLUTION
<p>6 CLEAN WATER AND SANITATION</p>	<p><b>Renewable energy</b></p> <ul style="list-style-type: none"> <li>• Climate change mitigation</li> <li>• Natural resource conservation</li> <li>• Pollution prevention and control</li> </ul>	<p><b>Clean energy creation</b> – solar panels provide clean renewable energy</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p><b>Climate change adaptation</b></p>	<p><b>Pollution reduction</b> – the Waste Water Treatment Facility (WWTF) utilizes the solar panels energy via a power purchase agreement. This reduces the heavy amount of energy required by the WWTF which would otherwise be coming from non-renewable sources of energy</p> <p><b>Energy efficiency</b> – the proximity of the site to the waste water facility offers a high energy efficiency</p>
<p><b>ESG RISK MITIGATION</b></p>		<ul style="list-style-type: none"> <li>• Renewable Energy consumption</li> <li>• Water Consumption</li> </ul>





- ✓ Accounts in balance
- ✓ Project updates
- ✓ Incoming receivables within range of model
- ✓ Meets target return of 7-9%
- ✓ Interest payments made on time

## SUSTAINABLE SEWERAGE | ONTARIO

The Canadian wastewater market is highly fragmented. The market requires small impact installations, rather than traditional centralised large waste water treatment plants. Our existing 200 projects are government linked and only fully licensed projects with no planning risks are being considered. Signina focuses on business consolidation of mid-sized businesses, operating in project sizes of \$5-50m. The small to mid-range business growth is supported by shifting demographic developments into smaller, satellite communities, as well as a stable favourable regulatory environment.

With wastewater rates rising steadily, the risk-reward associated with Signina's consolidation strategy is readily apparent and has picked up pace since its start in 2008. With larger institutional mandates we have triggered more deals diversifying from the existing projects. The investment model has not changed, but the reach within Ontario has become broader. Sustainable sewerage has become a major concern over the past couple of decades. The Safe Drinking Water Act 2002 (regulates the operation of potable water treatment plants and the pipe network) and the Ontario Clean Water Act 2006 (regulates actions required to protect source water from contamination, through assessment and implementation of measures to protect the water sources). The majority of the contracts are in municipalities that are rated A or higher by rating agencies. In addition there are various municipalities that do not carry any debt.

The operations are as expected. Q1 is always a slow for any upgrades due to the weather but it a good time of year to negotiate next steps for when the weather improves. Some of the new potential contracts have come to fruition or making significant progress in the past quarter. There also remains a pipeline of new business and contracts which are being assessed.

### UN SDG

### ICMA CRITERIA

### ESG POLICY SOLUTION

**6** CLEAN WATER AND SANITATION



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**11** SUSTAINABLE CITIES AND COMMUNITIES



#### Sustainable water and wastewater management:

- Pollution prevention and control
- Natural resource conservation
- Climate change adaption

#### Eco-efficient and/or circular economy adapted products, production technologies and processes

- Climate change mitigation
- Natural resource conservation

**Sustainability** - providing finance and assistance in creating and maintaining infrastructure for wastewater treatment and clean water

**Pollution prevention** - by creating sustainable sewerage infrastructure the need for septic tanks and landfill sites are heavily reduced. The waste water treatment assists an ongoing global problem with handling waste and impurities

### ESG RISK MITIGATION

- Water Re-use
- Water Pollution



# INDUSTRIAL RE-USE | BLUE PLANET, CALIFORNIA

The project is a **carbon capture and mineralization project based in Pittsburg, CA**. It captures both wastewater and CO<sub>2</sub> emitted from a gas-fired power plant and combine these with locally sourced demolished/returned concrete as a process input material to produce several different “CO<sub>2</sub> sequestered” and “up-cycled” aggregate products for use by Bay Area businesses, governments and consumers in a wide range of low-carbon, high-value concrete mix designs.

The wastewater and steam will be obtained from either the local power plant or from the sanitation district that can provide wastewater and the ammonia needed from their treatment plant which is located adjacent to the plant. As a result either method will use recycled water, which is legislatively supported in California. The whole process revolves around reusable and recyclable products. The carbon dioxide mitigation, waste water usage and demolished concrete process input provide a process producing recycled aggregates while reducing carbon dioxide.

The project and technology company continues operate as expected and has gained momentum from some large industrial firms.

- Maintain monthly communication with project team
- Document changes and delays to the permitting process



UN SDG	ICMA CRITERIA	ESG POLICY SOLUTION
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p><b>Climate change adaptation</b> <b>Green Buildings</b></p> <ul style="list-style-type: none"> <li>• Climate change mitigation</li> <li>• Natural resource conservation</li> <li>• Pollution prevention and control</li> </ul>	<p><b>Reuse of wastewater</b> – the water will be obtained from either the local power plant or from the sanitation district. This results in recycling the wastewater</p>
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p><b>Eco-efficient and/or circular economy adapted products, production technologies and processes</b></p> <ul style="list-style-type: none"> <li>• Climate change mitigation</li> <li>• Natural resource conservation</li> </ul>	<p><b>Recycling products</b> – the process also uses locally sourced demolished concrete as a process input to create aggregate products for use in the Bay Area</p>
<p>13 CLIMATE ACTION</p>		<p><b>Sustainable buildings</b> – the aggregates created in the process are from renewable and green sources. This in turn does not impact the environment negatively and meets the goal of sustainable cities and communities</p>
<p><b>ESG RISK MITIGATION</b>   • Water Re-use • CO<sub>2</sub> Emissions Neutrality • Pollution</p>		

- ✓ Accounts in balance
- ✓ Permitting process on schedule
- ✓ Timeline on Track
- ✓ In line to meet target return of 7-9%



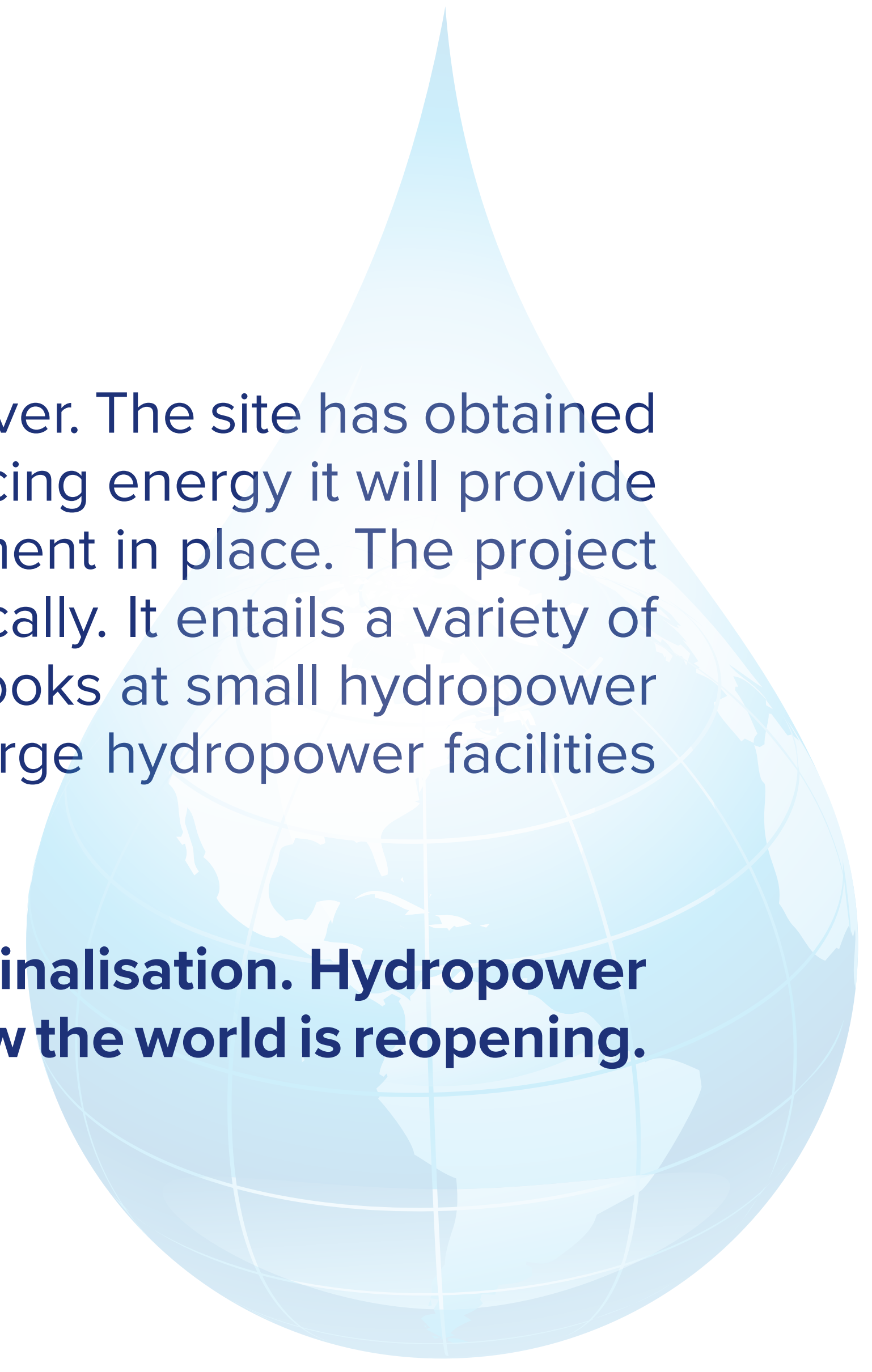
- ✓ Accounts in balance
- ✓ Regulatory requirements kept to date
- ✓ Costs within range of model
- ✓ Timeline on Track



## HYDROPOWER | MARSEILLES, ILLINOIS

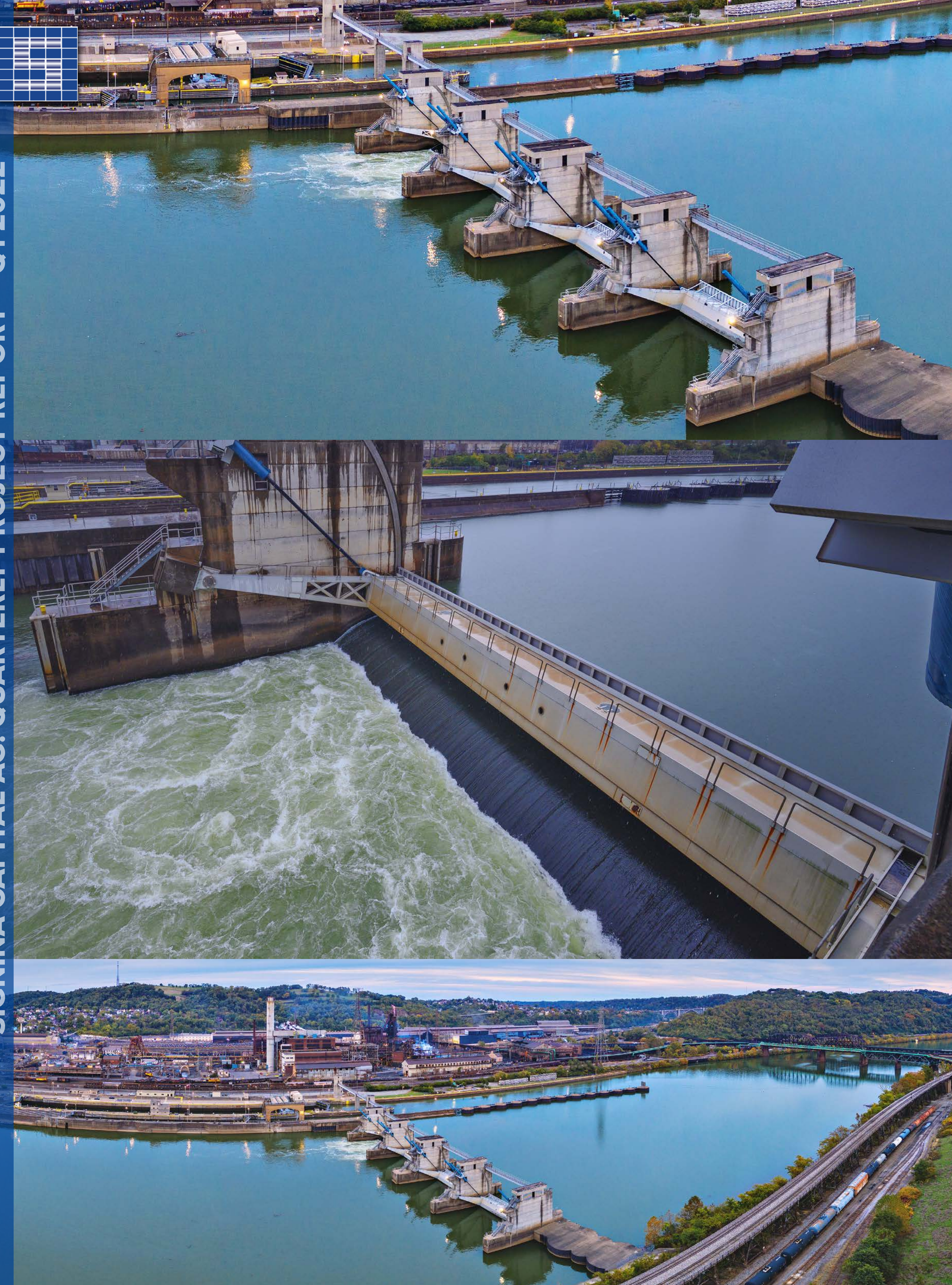
**Hydropower, Illinois:** A lock and dam hydroelectric water power project located on the Illinois River. The site has obtained a FERC License (expires 2061) with a 10.26MW capacity. Once the site is connected and producing energy it will provide power to the local municipalities and income will be generated by the power purchase agreement in place. The project is considered a small- or mid-sized project and has reduced the environmental impact dramatically. It entails a variety of environmental rules from the EPA that have been fulfilled with the FERC licence. The mandate looks at small hydropower facilities (below 25 MW) as such sites have minimal impacts on the surrounding area unlike large hydropower facilities which often have negative impacts on the surrounding environment.

The project continues to move slowly both on from a construction aspect as well as any PPA finalisation. Hydropower continues to be a hot topic in the clean energy movement and will likely pick up momentum now the world is reopening. There continues to be some volatility in the pricing too which is being monitored closely.

- Maintain monthly communication with onsite project manager
- Document any changes to the investment expectations
- Monitor the financial reporting, cash flows and accounts



UN SDG	ICMA CRITERIA	ESG POLICY SOLUTION
 <p><b>7 AFFORDABLE AND CLEAN ENERGY</b></p>	<p><b>Renewable energy</b></p> <ul style="list-style-type: none"> <li>• Climate change mitigation</li> <li>• Natural resource conservation</li> <li>• Pollution prevention and control</li> </ul>	<p><b>Renewable energy creation</b> - hydropower is a clean renewable source of energy which can be sold via a PPA agreement or via merchant wholesale pricing on hydropower exchanges</p>
 <p><b>14 LIFE BELOW WATER</b></p>	<p><b>Energy efficiency</b></p> <ul style="list-style-type: none"> <li>• Climate change mitigation</li> <li>• Pollution prevention and control</li> </ul> <p><b>Environmentally sustainable management of living natural resources and land use</b></p> <ul style="list-style-type: none"> <li>• Natural resource conservation</li> <li>• Biodiversity</li> <li>• Climate change adaptation</li> </ul>	<p><b>Environmental management</b> – the small hydropower market goes through a rigorous environmental approval process to make sure there is minimal impact to the surrounding region</p> <p><b>Biodiversity conservation</b> – the environmental approvals for such projects include aquatic preservation to ensure the natural environment is not negatively impacted</p>
<p><b>ESG RISK MITIGATION</b>   • Project Size under 25mw • Renewable Energy Production</p>		

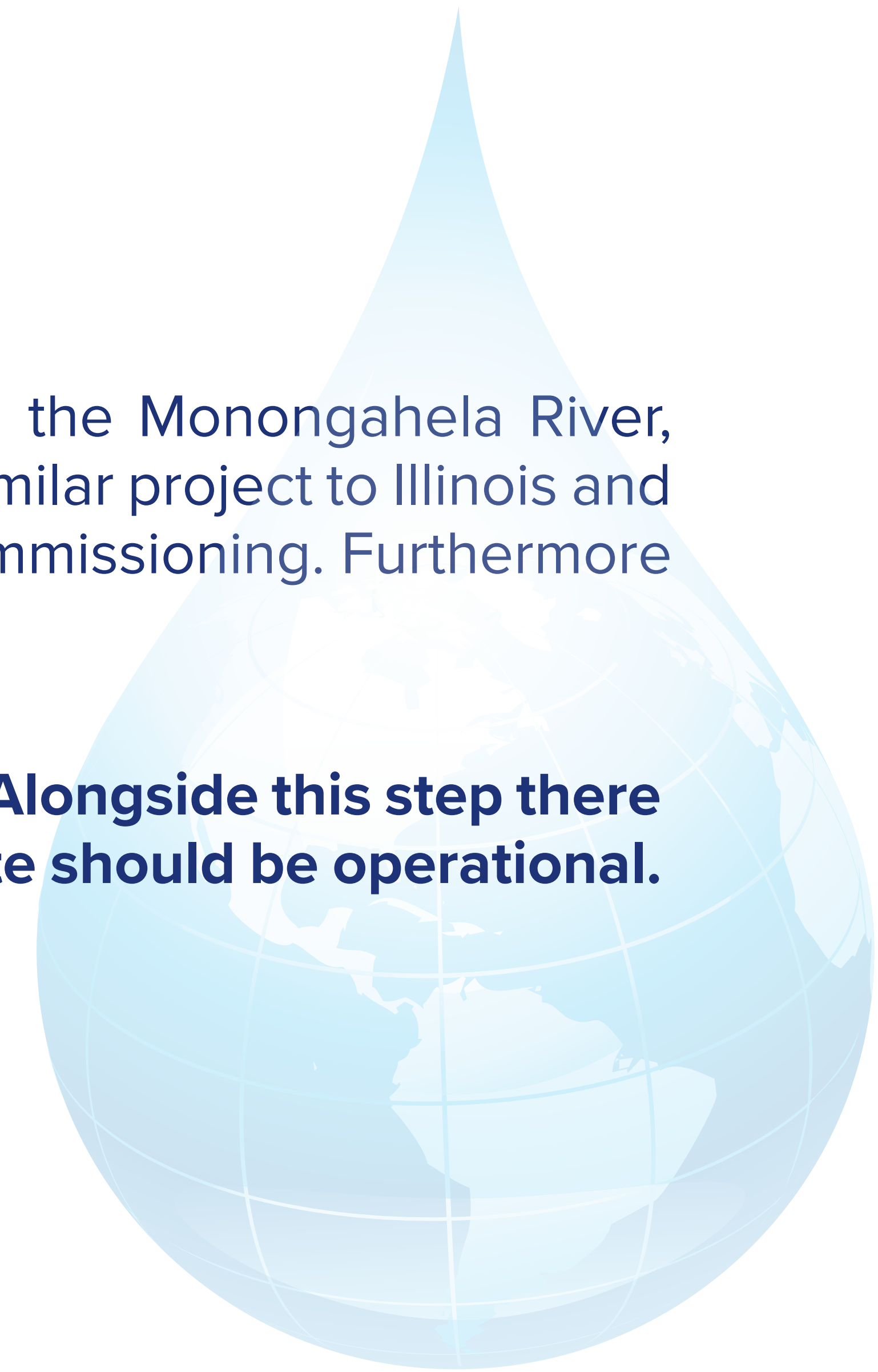


# HYDROPOWER | BRADDOCK, PENNSYLVANIA

**Hydropower, Pennsylvania:** A Lock and Dam Hydroelectric Water Power Project located on the Monongahela River, Pittsburgh. The site has obtained a FERC license (expires 1965) with a 5.25MW capacity. It is a similar project to Illinois and is in an advanced stage in the PPA negotiations to lock in a price for the first few years post commissioning. Furthermore the project has received state grants.

The project is getting through its final approvals in order to construct the Hydropower plant. Alongside this step there continue to be discussions with some local groups to regarding PPA offtakes for when the site should be operational.

- Maintain monthly communication with onsite project manager
- Document any changes to the investment expectations
- Monitor the financial reporting, cash flows and accounts



## UN SDG



## ICMA CRITERIA

### Renewable energy

- Climate change mitigation
- Natural resource conservation
- Pollution prevention and control

### Energy efficiency

- Climate change mitigation
- Pollution prevention and control

### Environmentally sustainable management of living natural resources and land use

- Natural resource conservation
- Biodiversity
- Climate change adaptation

## ESG POLICY SOLUTION

**Renewable energy creation** - hydropower is a clean renewable source of energy which can be sold via a PPA agreement or via merchant wholesale pricing on hydropower exchanges

**Environmental management** – the small hydropower market goes through a rigorous environmental approval process to make sure there is minimal impact to the surrounding region

**Biodiversity conservation** – the environmental approvals for such projects include aquatic preservation to ensure the natural environment is not negatively impacted

## ESG RISK MITIGATION

- Project Size under 25mw
- Renewable Energy Production

- ✓ Accounts in balance
- ✓ Regulatory requirements kept to date
- ✓ Costs within range of model
- ✓ Timeline on Track

## LATEST DEVELOPMENTS

The main areas from last quarter remain at various stages of progress. Furthermore there are a couple of other highlights:

- 1** The team will be going in May to the GWI Water Summit in Madrid. As discussed in Gasson's article above there will be an emphasis on "Water-Positive Zero Carbon". The summit should provide plenty of information and updates within the industry to report on after not having a summit for two years.
- 2** The Hydropower opportunity remains. The timeline remains unclear but has strong demand as the clean tech movement continues to crystallise. We see an increase of demand for REPAs (Renewable Energy Purchase contracts) that are quickly representing a good alternative to normal PPAs. Hydro continues to be an ongoing process on a larger scale and we are expecting closing of individual opportunities within the next six months.
- 3** Carbon linked projects – while we are not looking for direct carbon offset projects, the market is becoming much stronger to the point where we look for carbon linked projects, or even see the potential advantage for our current projects (for example Blue Planet and its link to the concrete market).
- 4** Agricultural Greenhouses – This opportunity is making headways across North America. We have sourced some sites with an operational management team and are looking to make strides forward in Q2. While we only provide debt on the waste-water part, most of our clients are more interested in the overall financing and we have received strong equity interest for this opportunity. We reiterate such greenhouses are popular in Europe and the technology has been tried and tested. We hope to provide a more detailed update at the end of next quarter.
- 5** We continue to merge some of our existing investments in waste-water Canada into a larger ownership opportunity. The transaction will conclude in Q2 and we have succeeded in bringing in ownership investors to profit from the current market environment. The merger of a large utility company in Canada continues to be a strong provider for growth and we are taking over resources and people from said outlet.



# REFERENCES

**1. CARBONISING MONEY FOR WATER**

[GWI – MARCH 2022](#)

**2. Cement, Concrete, Blue Planet, And Climate Change: Taking Lemons And Making Lemonade.**

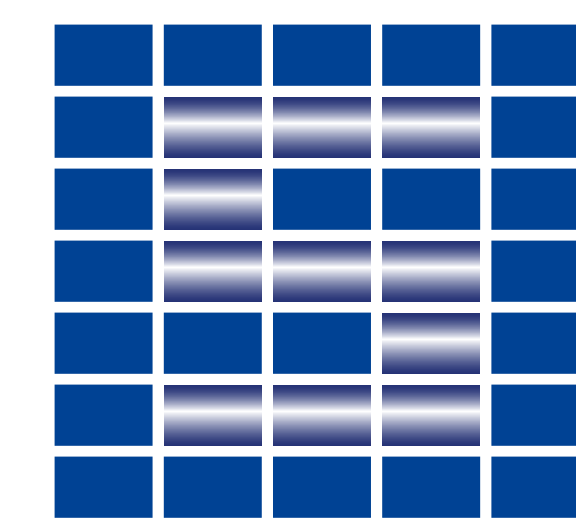
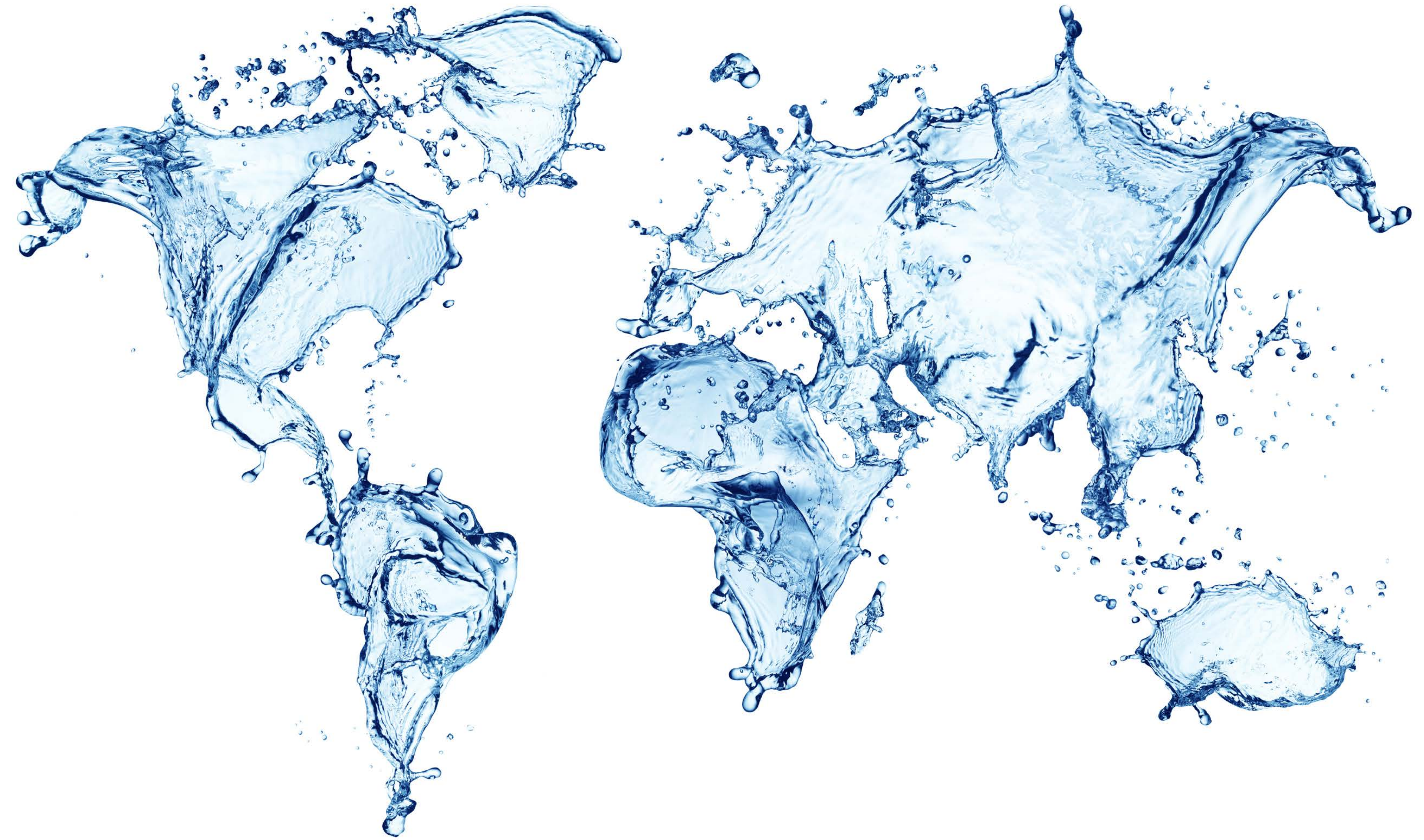
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# SIGNINA CAPITAL AG

Zurich-based Signina Capital AG was established in 2006. Signina is a full spectrum advisory firm in the water infrastructure sector. The team has more than 100 years of combined industry experience. They have placed in excess of USD 1 billion of capital with the private and public sector into environmentally and commercially strategic water infrastructure assets. It is currently overseeing more than USD 750 million of active water infrastructure assets.

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