SIGNINA CAPITAL AG

WATER INFRASTRUCTURE QUARTERLY REPORT – Q3 2022

CURRENT PROJECTS

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.

Greenhouses, Virginia

A lot of the groceries produced in the USA are transported across the country and come from regions with little water (such as leafy greens which are still 99% field grown in the US). This creates high costs and carbon footprint along with a lack of consistency for fresh produce. The greenhouses today can control the environment to produce fresher quality produce, utilizing less water, is local and sustainable. The project will be developed in Virginia for the local market.

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_2 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_2 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.

Q3 has seen significant issues crop up around the world, starting with an anticipated global recession, energy concerns and cost of living increases. Revisiting the Q2 report that referenced the energy crisis along with the continued need for improved infrastructure and more sustainable energy, such as hydropower. While we have been reviewing greenhouses for a while, we did not expect the impact to hit this quickly with regards to potential food supply issues. Water as always is involved in all industry dynamics but is often masked by the larger issues at hand. The world economy continues to falter; however it does not appear to be at the expense of the long term ESG and net zero needs, which continue to remain at the forefront of agendas (for now).

It is hard to say how Q4 will pan out this year. The policy shifts and a cold European winter will take centre stage alongside the continued war in Ukraine. The tumultuous geopolitics appears here to stay but the emphasis on the long term remains placing companies like Blue Planet at the forefront of net zero and climate developments. Inflation and bank policies could dictate the rhetoric heading into 2023.

Our 2022 ESG report will be released in the coming weeks providing updates on the latest developments.

REGIONAL MARKET INFORMATION

NEWS IN BRIEF

Calpine & Blue Planet Transform Captured Carbon into High-Grade Limestone.

https://calpinecarboncapture.com/calpine-blue-planet-transform-captured-carbon-into-high-grade-limestone/

Gotham Greens raises $310M and makes first acquisition.

https://www.fooddive.com/news/gotham-greens-indoor-greenhouse-raises-310m-first-acquisition/631541/

US DOE provides $13.5 million for record number of hydroelectric facilities.

https://www.waterpowermagazine.com/news/newsus-doe-provides-135-million-for-record-number-of-hydroelectric-facilities-10004354

For our German readers: Stabil in Krisenzeiten.

http://signinacapital.com/docs/Stabil_in_Krisenzeiten.pdf

A WATER CRISIS IN MISSISSIPPI'S CAPITAL IS A HARBINGER OF WORSE[1]

Jackson's residents have been without drinking water since August 29th.

A line of cars snakes around the Metrocenter, an abandoned mall in Jackson, Mississippi's capital and its largest city. The car park has weeds a foot high and potholes twice as wide. But it has recently come to life again, as one of seven temporary distribution sites handing out cases of bottled water to Jackson's 150,000 residents. Clean tap water stopped !owing into their homes over a week ago.

On August 29th excessive rainfall caused the Pearl River, which runs through Jackson, to overflow. The storm took out the city's main water-treatment plant, where pumps had already been failing. Because the floods reduced water pressure throughout the system, a back-up plant was not able to keep up with demand.

Local officials warned that Jackson would be without "reliable running water at scale" indefinitely. Mississippi declared a state of emergency the following day. It was swiftly approved by President Joe Biden, allowing the federal government to send funds to Jackson as well as hundreds of National Guard troops to support relief efforts. The stoppage has left many in the city unable to bathe, wash clothes or flush their toilets.

(Non-potable water is also being distributed for such activities.)

Jackson's system has been failing for years. Last year ice storms cut off water supplies for several weeks. And even when water flows, residents have been periodically advised to let it run for at least a minute to flush away lead; then to boil it before drinking in order to kill bacteria. Lead is not its only metal pollutant: since 2018 the city's water has failed to meet treatment standards for copper, too.

The scale of this problem extends well beyond Jackson. Nearly 21m Americans drank water from communal systems (including schools, hospitals and other public places) that did not meet safety standards in 2015, the latest year for which data are available. From 2014 to 2016 tens of thousands in Flint, Michigan, were exposed to lead poisoning and possibly Legionnaires' disease (a nasty kind of pneumonia) through their tap water. In August high levels of arsenic were found in the water system of a public-housing complex in Manhattan that serves some 4,000 people.

Mami Hara of the us Water Alliance, a non-profit group, says Jackson's crisis stems in part from a broad failure to ensure equal access to water. Four in five of its residents are black, and many are poor. For others across the country, even a shower remains out of reach. Over 1m Americans do not have complete indoor plumbing (defined as having hot and cold water with an indoor bath or shower). Nearly half of those without indoor plumbing live in cities, and they are more likely to be non-white, poor and renters.

Since the Clean Water Act of 1972, which regulated quality standards for America's waterways, federal investment in water infrastructure has decreased as a proportion of total infrastructure funding. Most water pipes were installed in the 1970s and 1980s, and few upgrades have been made to them since. As much as 18% of treated potable water is lost to leaks each day, estimates McKinsey, a consulting firm. Last year the governor of New Jersey signed a bill to remove all lead pipes in the state within a decade, at an estimated cost of $2.7bn. In August congressional representatives complained to the Environmental Protection Agency (epa) of an "absurd disparity" in its allocation of federal funds to New Jersey.

Without adequate funding, access to clean water will worsen. Extreme weather is pushing old systems to their limits. Last year a legislative delegation from Jackson failed to obtain $42m from Mississippi to cover water-infrastructure improvements. Jackson's mayor, Chokwe Lumumba, says the city's water crisis is "dehumanising" for its people. He reckons $1bn is needed to #x its water system.

Some federal help is on the way. In December the epa allocated $75m to improve Mississippi's water and sewer systems. The Bipartisan Infrastructure Law, signed by Mr Biden in November, will shower $55bn on water-infrastructure projects and upgrades across the country (of which $429m will go to Mississippi over the next five years). Millions of Americans are thirsting for them.

GRAHAM CAPITAL FINDS A ROUTE INTO CANADIAN ASSET FINANCE WITH MAP MODEL[2]

By minimising the need for an equity return and utilising off-balance sheet debt, the Canadian construction firm has come up with a new way to address Canada's water infrastructure spending deficit. Will it catch on?

The financial close of a wastewater treatment upgrade project in Wetaskiwin, Alberta, marks the first successful deployment of Graham Capital's Municipal Asset Partnership model, which the firm is keen to promote as a new way of financing infrastructure in Canada. The concept involves creating a separate municipal authority to hold the assets in question, and then forming a limited partnership project company, in which the authority and Graham Capital are equal shareholders (see chart).

In Wetaskiwin, the provincial grant originally awarded to the project was leveraged as equity – reducing the private sector equity slice to around 2% – while the balance of the project's CA$53 million (US$40 million) cost was raised through a green bond issued by the authority. The cashflows to service the bond come from the municipality's rate base, and the bond itself remains remote from the municipal balance sheet.

The desire to create a model which borrows the best parts of a public-private partnership (P3) but removes the need for a private sector equity return comes partly in response to Canada's municipal infrastructure funding deficit, set against the country's almost pathological reluctance to relinquish ownership of core infrastructure assets such as water and wastewater treatment plants.

"We developed this model because we think that the available options for municipalities are inadequate to address the needs of the market," said Sam Johnson, associate director for concessions at Graham Capital.

"The Municipal Asset Partnership model is an alternative financing and delivery framework designed to solve three broad groups of challenges. Municipalities generally do not want to cede control of their infrastructure, and many are butting up against financial constraints, both in terms of borrowing capacity and rates. They also lack flexibility in terms of being able to access financing for smaller-scale projects. The key points of MAP are retention of control, off-balance sheet debt treatment, and low-cost capital thanks to minimising equity. The benefit of establishing a municipal authority is that it allows us to ring-fence the utility programme, and we're confident that we can wrap the structure around a project with capital expenditure as low as Can$20 million. We're especially focused on the lower end of the range, which represents probably 95% of Canadian municipalities."

Johnson is unfazed by the suggestion that the very municipalities for which the MAP solution could be most applicable are likely to be among the least creditworthy, given their restricted tax bases. "I don't see that as a significant barrier, and my view is that the debt limits that are set by legislation are probably lower than what the market can bear". Graham Capital is not shy about admitting that its chief objective in structuring projects using the MAP model is to create construction opportunities for its inhouse contracting arm. Although it does not expect a traditional equity return for its work on the development side, a very modest cost recovery element is understood to be built into the financing repayments. "Our objective with this structure

is basically to get private sector equity squeezed out almost entirely so we can dramatically improve affordability," observed Johnson.

"The municipality gets the support that it needs without ceding control of the process, and we can structure it off-balance sheet, leaving them flexibility for other municipal priorities. By squeezing out equity to the maximum extent possible, we get the weighted average cost of capital down to a level that is very similar to what a municipality could achieve by simply borrowing directly to finance a project itself. In addition, debt lenders in Canada are more interested in a transaction like this which has a municipal backstop. It is a differentiated service offering, and I don't think you'll find anything else like it in North America."

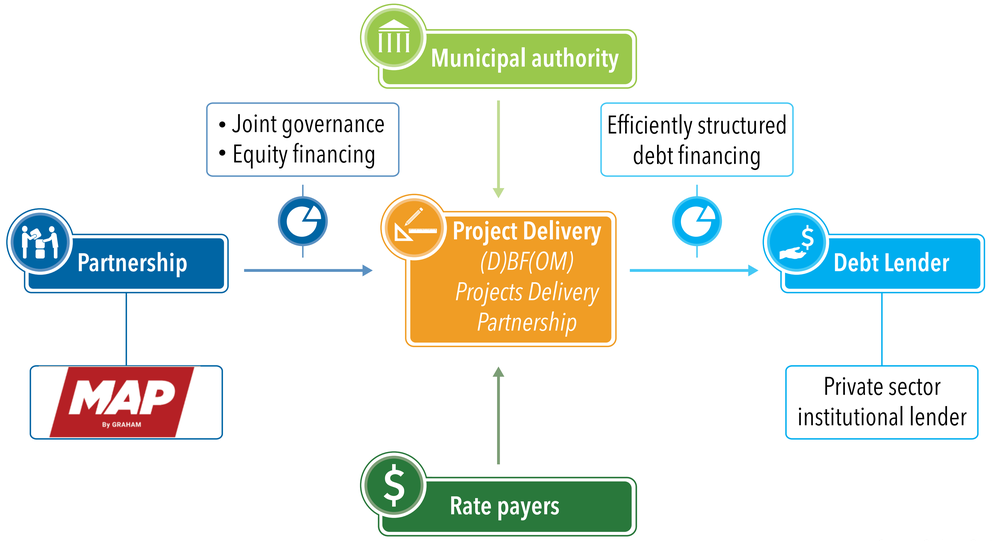
In theory, the MAP model is applicable across Canada wherever there is a need to build an asset which has a defined user base and an independent revenue stream. Graham views it chiefly as an option to be presented in response to a public tender, as in Wetaskiwin, which ran a qualifications based process for a full-scale design-build finance- operate-maintain project before electing to pioneer the MAP concept.

Many lagoon-type wastewater treatment plants built in Canada in the 1970s no longer meet provincial effluent requirements, and so there is likely to be a steady stream of upgrades in need of funding. Johnson indicated that Graham would be comfortable structuring a couple of deals a year using the MAP format.

"We're still in the education stage, but there are thousands of municipalities out there that have been looking for this type of model," observed Grenville Riley, managing director of developments at Graham Capital. "I think the biggest challenge we are going to have is managing our own capacity to deliver. Graham Capital is uniquely positioned in the market to take this and run with it, as it's not a model which other developers would be interested in pursuing, given that it squeezes out costly equity. Whereas for Graham, it's exactly what the company wants, because it's generating construction projects. We're talking to many different municipalities across Canada to offer exactly the same service, and I think we'll see quite an influx of projects. This could snowball very, very quickly."

HOW DOES GRAHAM'S MUNICIPAL ASSET PARTNERSHIP MODEL WORK?

By borrowing the best parts of a public-private partnership but removing the need for an equity return, Graham Capital hopes to channel a greater number of projects to its in-house construction arm. The model may struggle to find traction outside of the small-scale Canadian municipal market.



Source: Graham Capital

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

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**

UN SDG	ICMA CRITERIA	ESG POLICY SOLUTION
6 CLEAN WATER AND SANITATION 7 AFFORDABLE AND CLEAN ENERGY	**Renewable energy** • Climate change mitigation • Natural resource conservation • Pollution prevention and control **Climate change adaptation**	**Clean energy creation** – solar panels provide clean renewable energy **Pollution reduction** – 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 **Energy efficiency** – the proximity of the site to the waste water facility offers a high energy efficiency

ESG RISK MITIGATION | • Renewable Energy consumption • Water Consumption

- ✓ 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

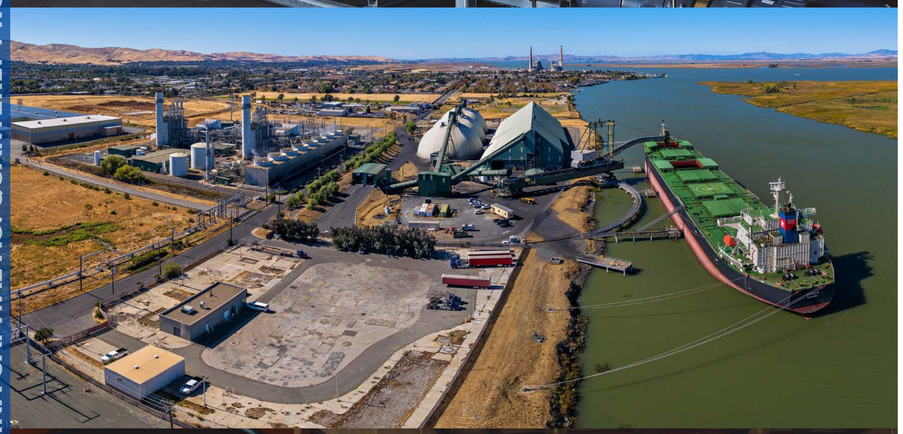
The Canadian wastewater market is highly fragmented. The market requires small impact installations, rather than traditional centralised large waste water treatment plants. Our existing 300 projects are government linked and only fully licensed projects with no planning risks are being considered. Signina 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. Sustainable sewerage has become a major concern over the past couple of decades. 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. 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



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

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_2 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_2 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
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION	**Climate change adaptation** **Green Buildings** • Climate change mitigation • Natural resource conservation • Pollution prevention and control **Eco-efficient and/or circular economy adapted products, production technologies and processes** • Climate change mitigation • Natural resource conservation	**Reuse of wastewater** – the water will be obtained from either the local power plant or from the sanitation district. This results in recycling the wastewater **Recycling products** – the process also uses locally sourced demolished concrete as a process input to create aggregate products for use in the Bay Area **Sustainable buildings** – 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

ESG RISK MITIGATION | • Water Re-use • CO_2 Emissions Neutrality • Pollution

- ✓ **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
7 AFFORDABLE AND CLEAN ENERGY 14 LIFE BELOW WATER	**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	**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

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	ESG POLICY SOLUTION
7 AFFORDABLE AND CLEAN ENERGY 14 LIFE BELOW WATER	**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	**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

- ✓ Off-take agreement signed
- ✓ All licenses acquired
- ✓ All EPC contracts and bonding signed
- ✓ Costs within range of model
- ✓ Timeline on Track

GREENHOUSES | VIRGINIA, USA

A lot of the groceries produced in the USA are transported across the country and come from regions with little water (such as leafy greens which are still 99% field grown in the US). This created high costs and carbon footprint along with a lack of consistency for fresh produce. The greenhouses today can control the environment to produce fresher quality produce, utilizing less water, is local and sustainable.

There is continued growth of advanced greenhouse market (482 acres built or in construction in U.S. since 2018). There has been significant disruption in leafy greens caused by food safety (recalls), changing climate, and labour availability. There is an expected acceleration in food service driven by demand for food safety, resiliency, and quality representing a strong growth sector. The target crop segments benefit from demand for sustainably grown, local food, enhanced convenience and taste, and improved food safety.

The major food chains need reliable produce which is hard with purely field grown facilities. Therefore similar to other areas in infrastructure the various food service, retail and integrated growers are happy to sign off-take agreements to guarantee a reliable product. Such greenhouses are plentiful in Europe reducing the technology risk to being tried and test.

UN SDG	ICMA CRITERIA	ESG POLICY SOLUTION
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 15 LIFE ON LAND	**Energy efficiency** • Climate change mitigation • Pollution prevention and control **Environmntally sustainable management of living natural resources and land use** • Natural resource conservation **Eco-efficient and/or circular economy adapted products, production technologies and processes**	**Food Security** – The sites create standardized produce. The classic agriculture method leaves a lot of the quality down to the elements. This could lead to bad harvests. The Greenhouses secure the output quality and quantity. **Enivronmental Management** – The greenhouses reduce the amount of water required in order to grow the fresh produce. As it is under strict conditions the process can be optimized. Furthermore the sites are local rather than cross country.

ESG RISK MITIGATION | • Water Consumption • Pollution • Water Re-Use

LATEST DEVELOPMENTS

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

1 Carbon linked projects – Blue Planet continues to make strides. The Calpine deal (link in the general section) shows the interest of large corporations who want to take such projects and produce on an industrial scale. We are on the lookout for similar projects or even more directly carbon linked projects.

2 Agricultural Greenhouses – This opportunity continues to make headway across North America. We have shortlisted a couple of sites which are now in final planning stages. In Q4 we will know if the project and thesis has the growth potential anticipated. Some of the large supermarkets have been looking at greenhouse technology providing further comfort that there are multiple off-takers for the produce.

3 We continue to merge some of our existing investments in waste-water in Canada into a larger ownership opportunity. The transaction is in its final stages and will conclude in Q4. We have succeeded in bringing in ownership investors to profit from the current market environment. The opportunity set continues to grow.

4 The Hydropower opportunity – similar to last quarter the timeline remains unclear especially with the energy crisis. We continue to see an increase of demand for REPAs (Renewable Energy Purchase contracts) that are quickly representing a good alternative to normal PPAs. The process is ongoing with market factors playing into the assets favour (clean energy and price levels).

REFERENCES

1. **A water crisis in Mississippi's capital is a harbinger of worse.**
   https://www.economist.com/united-states/2022/09/06/a-water-crisis-in-mississippis-capital-is-a-harbinger-of-worse

2. **Graham Capital finds a route into Canadian asset finance with MAP model.**
   GWI Report July 2022

LEGEND

INDUSTRY

Waste Water symbol: refers to projects in the US and in Canada and includes water treatment, water discharge and waste water treatment.

Re-cycle symbol: refers to industrially used water that is recycled or re-used and cleaned for our projects.

Hydro symbol: refers to any project that generates energy out of flowing water.

PROGRESS

Cloud / Contract: the planning stages and contracts are drawn up and we have fully due diligenced all security matching our criteria.

Rocket / Money: execution of all major contracts, licences and financing has been agreed upon.

Cog Wrench: Construction is in progress.

Bar Chart: project is producing cash flows or fully financed and up and running.

COLOUR

Brown-yellow: contains current or past brownfield status combined with extensions or upgrades.

Brown: brownfield projects mid-stage projects that we entered relatively early with a limited or de-risked construction period.

Green: greenfield projects mean that we are an active part since the very beginning of the projects. This is unusual for us and only applies to a fully de-risked contractual situation.

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.

SIGNINA CAPITAL AG

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