SIGNINA CAPITAL AG

WATER INFRASTRUCTURE
QUARTERLY REPORT – Q1 2024

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.

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.

PROJECT RELATED DEVELOPMENTS

Carbon linked projects

We had the Blue Planet management team in Zurich in March giving an update on the current site and their plans for the coming year and beyond. There continues to be progress with multiple large industrial firms with ongoing contract closures. The commercial and automatization phase at the San Franciso Bay Aggregates (SFBA) site continues and remains on schedule to be completed by the end of Q2 2024/early Q3. This milestone will lead to multiple hurdles being met with industrial clients.

Agricultural Greenhouses

The site is finishing construction. The first harvest remains to be in Q2/Q3 2024. We aim to visit the site over summer with the first produce being completed.

Web Link camera showing the inside of the greenhouse.
http://tinyurl.com/nm3wwwbn

Waste water in Canada

We continue to see supply for sites that need upgrading. This continues to be a task of reviewing feasible sites and the economics of them. However the potential projects and expansions are slow moving and with the current regulatory framework it is prudent to not rush into anything. The opportunity and pipeline will be discussed further in Q2/Q3 now that the winter months in Canada are behind us.

Hydropower

PPAs continued to be reviewed with pricing monitored. The projects are being appraised and the hope will be there will be a significant update and movement during the year. Our Braddock project is moving along according to plan and PPA and constructions are currently being finalised.

REGIONAL MARKET INFORMATION

NEWS IN BRIEF

Ship-based carbon capture and microwave EV range boosters: The best green innovations of February 2024

https://www.edie.net/ship-based-carbon-capture-and-microwave-ev-range-boosters-the-best-green-innovations-of-february-2024/

Blue Planet – Restructuring Carbon Capture

https://player.vimeo.com/video/927956393?badge=0&autopause=0&player_id=0&app_id=58479

XPV Water Partners Announces Sale of Isle Utilities

https://xpvwaterpartners.com/insights/news/press-releases/2024/02/29/xpv-water-partners-announces-sale-of-isle-utilities

SCALING CARBON CAPTURE WON'T BREAK THE BANK[1]

The below is a summary from BCG.

Carbon capture, utilization, and storage (CCUS) is making big strides. With multiple projects under development, capacity for the nascent climate mitigation technology is on track to reach about 300 million tons per year (Mtpa) of CO_2 abatement by 2035.

This amount is almost ten times operational CCUS capacity today, but it falls far short of the approximately 4,000 Mtpa of CO_2 of capacity that the International Energy Agency (IEA) estimates will be required by 2035 to achieve a 1.5°C pathway. (In this article, the authors used the IEA's net-zero[2] emissions by 2050 scenario, which is among the most conservative for CCUS demand, for their analysis).

Fortunately, the extra capacity needed to hit this target won't break the bank. Generous incentives, especially in the US and European countries such as Norway and the UK, have made many more CCUS projects commercially viable. Such incentives are driving an eight-fold increase in project announcements worldwide since 2017. The development of these projects will reduce costs for all players, particularly benefiting lower-middle income and low-income countries that are just starting to adopt CCUS.

In the same way that experience curve[3] benefits have lowered the expense of renewable energy production, CCUS capex costs can be expected to fall as more capacity is installed. As a result of this decline, BCG estimates that a global incentives floor of $65 to $75 per ton of carbon abated—which is about one-third lower than current assumptions—will be needed to reach the goal of 4,000 Mtpa of CO_2.

This is good news for governments and stakeholders confronting the climate change[4] challenge. The realization that broad deployment of CCUS will ultimately cost less than previously estimated has the potential to accelerate its use in multiple countries and across a range of sectors. However, policymakers will still need to create favorable project conditions and regulations and define viable business models so that more projects can proceed.

Reasons to be Optimistic About Carbon Capture Deployment

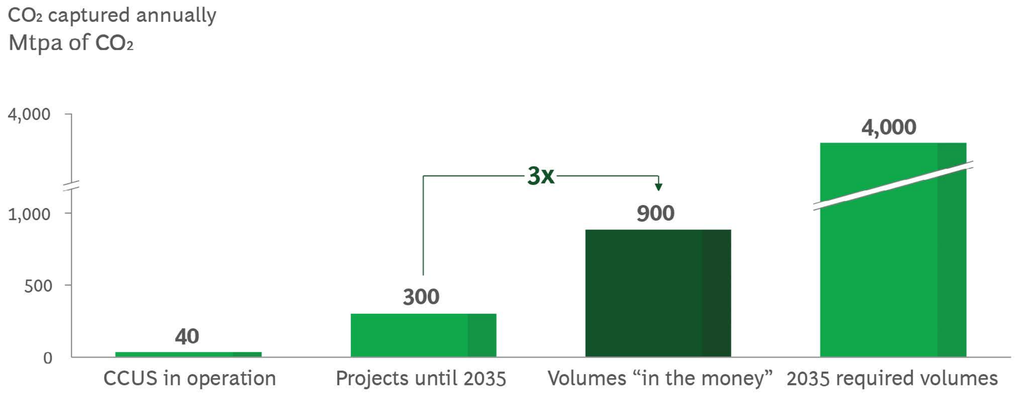
CCUS is an essential lever for reducing global greenhouse gas emissions. As well as decarbonizing sectors with large, stationary emitters or with hard-to-abate emissions, it can also remove carbon directly from the atmosphere using engineered carbon removal solutions, direct air capture, or bioenergy with carbon capture and storage.

BCG's work with the Oil and Gas Climate Initiative (OGCI) demonstrates that the world can reach levels of CCUS deployment needed for net-zero emissions by 2050 without breaking the bank, but it will require stakeholders across the value chain to be far more proactive.

Here's how the math works out. While CCUS capacity is on track to reach about 300 Mtpa of CO_2 by 2035, a further 600 Mtpa of CO_2 of projects are "in the money" today (meaning they would break even if built based on current costs and incentives and assuming a reasonable cost of capital) in locations where they can be bundled into hubs that share infrastructure and reduce operational risks.

These projects have yet to be announced as they still need better regulations, permitting, and government-backed commercial arrangements before they can go ahead. Importantly, however, there's a line of sight to almost 1,000 Mtpa of CO_2 of capacity.

Exhibit 1 - Expanding Carbon Capture Capacity to Almost 1 Gigaton



Source: BCG Global CCUS Hubs Model.

Note: CCUS = carbon, capture, utilization, and storage. Mtpa of CO_2 = millions tons per year of CO_2 abatement. "In the money" projects are those that would break even if built based on current costs and incentives and assuming a reasonable cost of capital. Estimates exclude potential volumes from direct air capture plants. "In the money" volumes are from bottom-up estimates of plants in CCUS applicable sectors with abatement costs equal to or lower than the current level of incentives in the country.

This still leaves a requirement for approximately 3,000 Mtpa of CO_2 of capacity. CCUS can be expected to follow a similar trajectory to other industrial technologies, such as sulfur and nitrous oxide scrubbers which have seen capex costs decline by 10–12% every time capacity doubles.

Deploying CCUS at the scale of announced projects—about 300 Mtpa of CO_2 by 2035—has the potential to cut capex costs by 30%, with overall abatement costs, once this capacity has been installed, roughly 80% of what they are today.

Because capex costs are reduced, the volume of financial incentives required to make CCUS projects profitable is also lower. BCG calculates that a floor in per-country incentives of $65–$75 per ton of carbon abated will be needed to deliver an extra 3,000 Mtpa of CO_2 of CCUS capacity by 2035. Incentives include tax credits, capital grants, and carbon pricing schemes.

This figure, which is significantly below the $100 per ton that most climate economists estimate is required to achieve net-zero emissions by 2050, is possible because incentives in high-income countries, such as Norway, the UK, and the US, are already generous, which means that lower-middle income and low-income countries can pay less.

Stakeholders Need to Take Action in Three Areas

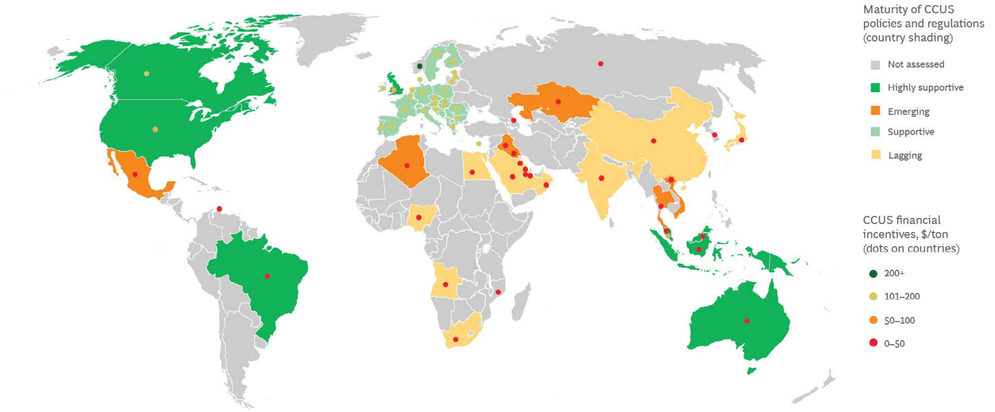
BCG estimates that the total capex costs involved in reaching 4,000 Mtpa of CO_2 of CCUS capacity will be $1.2 trillion after taking into account experience curve benefits. But while this amount—which will require both public and private-sector investment—is a significant one in aggregate, it is expected that CCUS capex will be affordable at a national level. It represents between 1% and 2% of annual government expenditure or less than 0.5% of GDP in most countries with high CCUS potential.[5]

To make CCUS projects happen at scale, policymakers and companies will also need to take actions in the following areas:

- Accelerating deployment where incentives already exist
- Expanding carbon pricing and financing schemes worldwide
- Creating demand for low-carbon products and services

CCUS is essential if we are to limit global warming. BCG's finding that broad deployment of the technology could cost significantly less than previously estimated should encourage more countries to provide the incentives needed to make projects a reality. However, financial support is only part of the puzzle. Both governments and companies must also take targeted actions, such as improving permitting and establishing markets for low-carbon goods and services, to make CCUS a success at scale.

Exhibit 2 - Policies, Regulations, and Financial Incentives for Carbon Capture, Utilization, and Storage Worldwide



Source: BCG analysis.

Note: CCUS = carbon, capture, utilization, and storage. The CCUS financial incentive figure is the aggregate of all financial incentives available for CCUS in an individual country across carbon taxes and pricing, capital grants, and direct subsidies.

THE IMPACT OF TEXTILE PRODUCTION AND WASTE ON THE ENVIRONMENT[6]

With fast fashion, the quantity of clothes produced and thrown away has boomed. Find out more about the environmental impact and what the EU is doing about it.

Fast fashion is the constant provision of new styles at very low prices. To tackle the impact on the environment, the EU wants to reduce textile waste and increase the life cycle and recycling of textiles. This is part of the plan to achieve a circular economy by 2050.

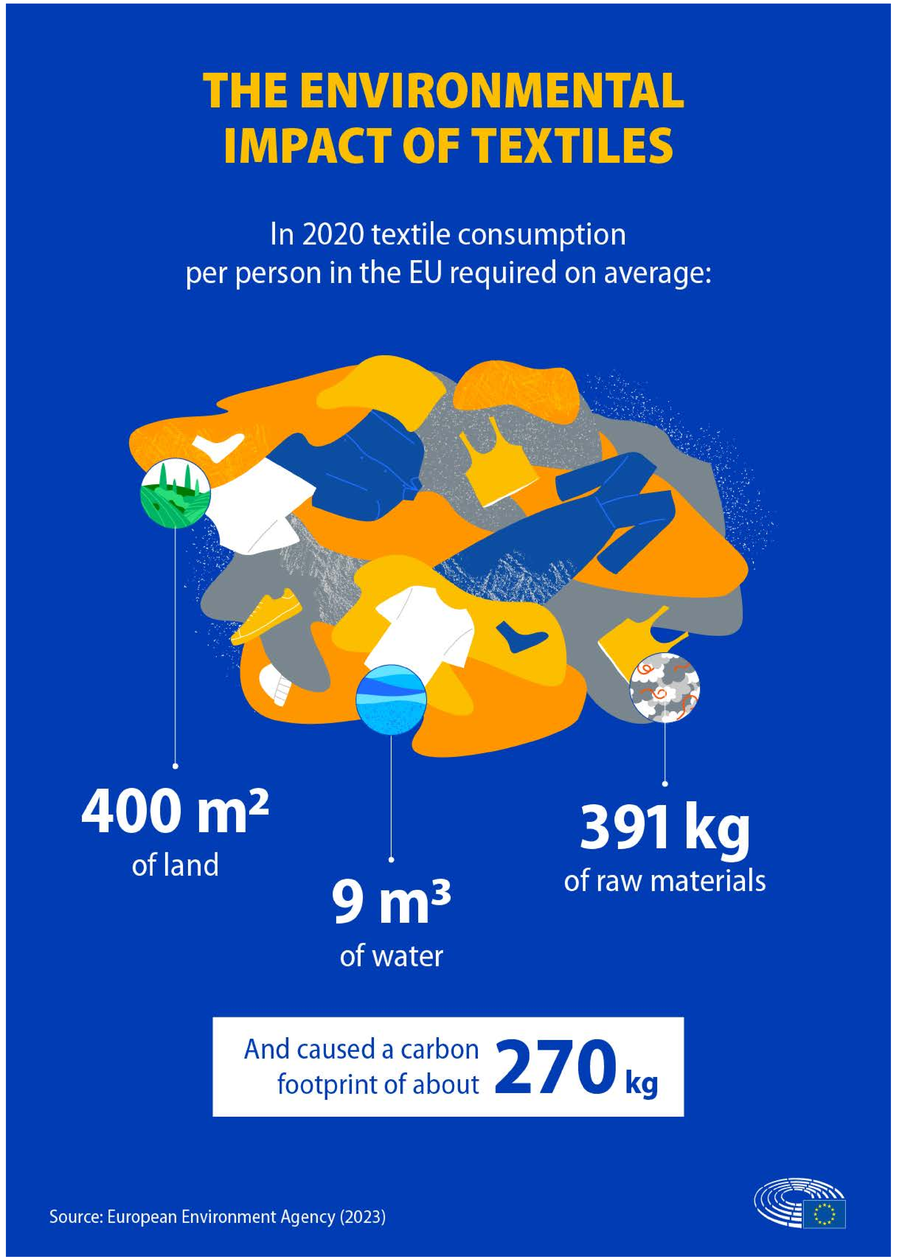
Overconsumption of natural resources

It takes a lot of water to produce textile, plus land to grow cotton and other fibres. To make a single cotton t-shirt, 2,700 litres of fresh water are required according to estimates, enough to meet one person's drinking needs for 2.5 years.

The textile sector was the third largest source of water degradation and land use in 2020. In that year, it took on average nine cubic metres of water, 400 square metres of land and 391 kilogrammes (kg) of raw materials to provide clothes and shoes for each EU citizen.

Water pollution

Textile production is estimated to be responsible for about 20% of global clean water pollution from dyeing and finishing products. A single laundry load of polyester clothes can discharge 700,000 microplastic fibres that can end up in the food chain. The majority of microplastics from textiles are released during the first few washes. Fast fashion is based on mass production, low prices and high sales volumes that promotes many first washes.



Washing synthetic products leads to the accumulation of more than half a million tonnes of microplastics on the bottom of the oceans every year. In addition to this global problem, the pollution generated by garment production has a devastating impact on the health of local people, animals and ecosystems where the factories are located.

Greenhouse gas emissions

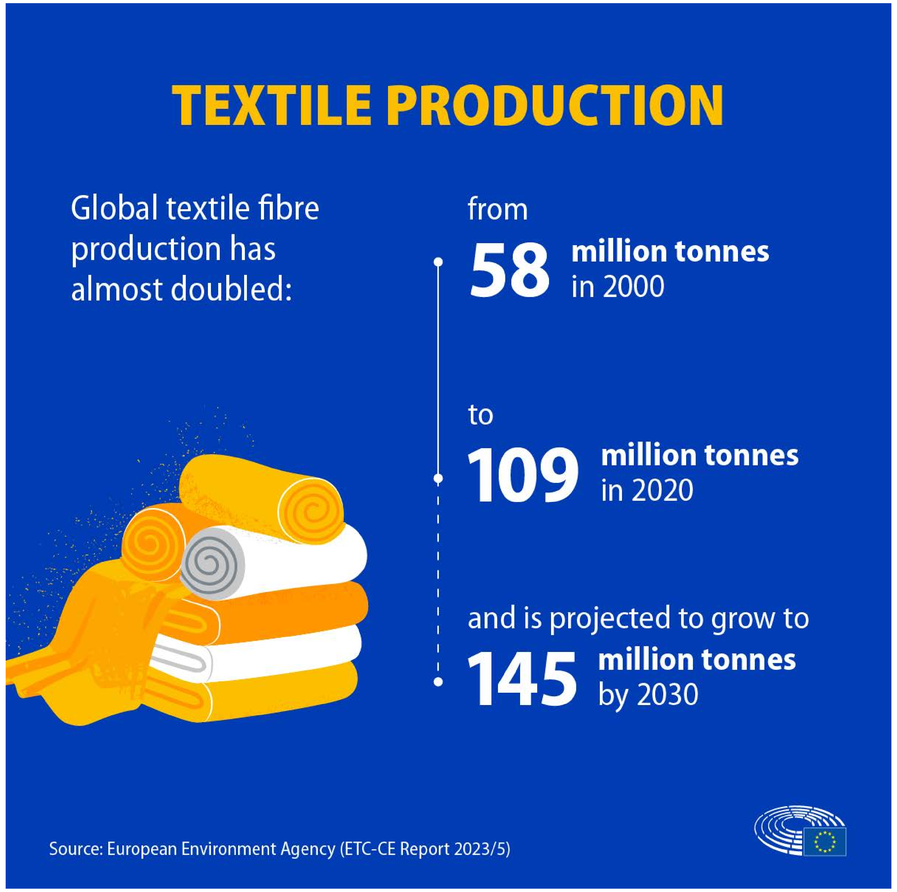
The fashion industry is estimated to be responsible for 10% of global carbon emissions – more than international flights and maritime shipping combined. According to the European Environment Agency, textile purchases in the EU in 2020 generated about 270 kg of CO_2 emissions per person. That means textile products consumed in the EU generated greenhouse gas emissions of 121 million tonnes.

Textile waste in landfills and low recycling rates

The way people get rid of unwanted clothes has also changed, with items being thrown away rather than donated. Less than half of used clothes are collected for reuse or recycling, and only 1% of used clothes are recycled into new clothes, since technologies that would enable clothes to be recycled into virgin fibres are only now starting to emerge.

On average Europeans use nearly 26 kilos of textiles and discard about 11 kilos of them every year. Used clothes can be exported outside the EU, but are mostly (87%) incinerated or landfilled. The rise of fast fashion has been crucial in the increase in consumption, driven partly by social media and the industry bringing fashion trends to more consumers at a faster pace than in the past.

The new strategies to tackle this issue include developing new business models for clothing rental, designing products in a way that would make re-use and recycling easier (circular fashion), convincing consumers to buy clothes of better quality that last longer (slow fashion) and generally steering consumer behaviour towards more sustainable options.



ROLAND BERGER BUYS AMANE AS WATER MOVES UP THE AGENDA FOR STRATEGY CONSULTANTS[7]

The German strategy consultant sees the opportunity in owning the leading global advisor on water.

One of the world's top global strategy consultants has acquired Amane Advisors, the leading firm advising corporate clients on value creation in the water sector.

The deal reflects an expectation that water will become a growing focus of corporate and investment activity in the coming years. Other strategy consultants including McKinsey, Boston Consulting Group, Beringa, and LEK have also been building expertise in water as climate change and fears over water security are driving demand for better advice.

Roland Berger is headquartered in Munich and has over 3,000 employees spread across 34 countries. Founded in 1967 by the eponymous Roland Berger, it built its business by selling US-style management consulting to European industrial clients. It retains a strong industrial base in Europe, offering new opportunities to Amane.

Amane Advisors was founded in Paris in 2010 by former Suez and Earth Tech executive Thierry Noel. The firm became the go-to consultancy for private equity investors and major corporates looking for advice on water deals after Geoff Gage joined from McKinsey in 2016, setting up an office in Oxford, UK. Noel, known in the industry for his charm and his trademark bush of hair, remains as a part-time senior advisor to Roland Berger. Gage, together with Mathieu de Kervenoael and Bastien Simeon in Paris, Christophe Guillet in Bahrain, Bill Malarkey in Philadelphia, and around 50 other staff, joined Roland Berger full time on 1st March.

Roland Berger Central Europe managing director Torsten Henzelmann said that the expansion of the firm's climate action consulting began when it determined that technologies around making the economy sustainable should help define the firm's purpose. Water technology would be one specific area of growth which matched the needs of its client base.

Gage sees two areas where Roland Berger can add value to Amane. "One is on the industrial side. I think water has really shifted to become a genuine strategy topic. Even a few years ago people talked about it, but they didn't actually do much, and now water has become really critical to business operations. The second is on the utility side. For us as Amane, we are helping utilities today, but we don't have the full suite of capabilities. We can't help on things outside of core operations where we offer solutions on leakage and the like, so that was another reason for us looking for a partner. The deal with Roland Berger brings us the full set of capabilities to support a broader transformation, helping utilities on organisation and leadership and procurement. We are always pleasantly surprised with how much opportunity we see when we go deep into utility operations".

- ✓ 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

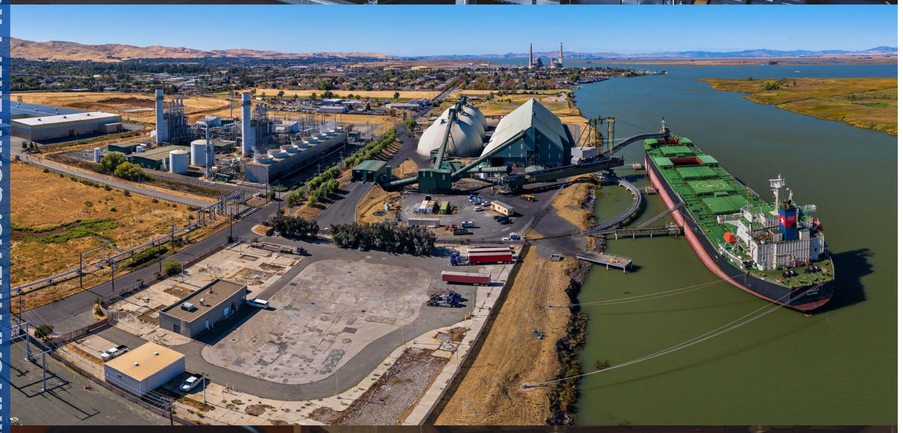
The Canadian wastewater market is highly fragmented. The market requires small impact installations, rather than traditional centralised large waste water treatment plants. Our existing 300 projects are government linked and only fully licensed projects with no planning risks are being considered. Signina 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

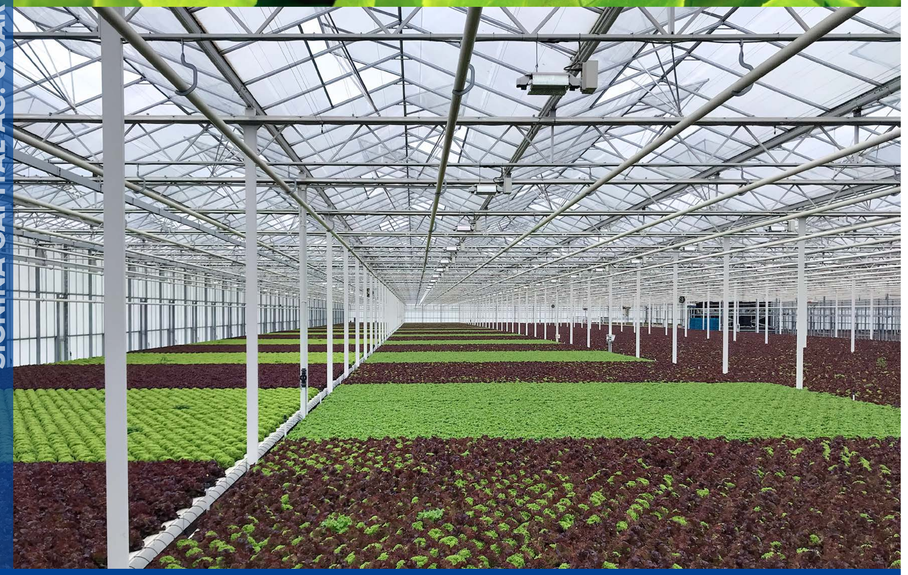
Hydropower, Pennsylvania: A Lock and Dam Hydroelectric Water Power Project located on the Monongahela River, Pittsburgh. The site has obtained a FERC license (expires 1965) with a 5.25MW capacity. It is a similar project to Illinois and is in an advanced stage in the PPA negotiations to lock in a price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

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   https://www.bcg.com/capabilities/climate-change-sustainability/overview
5. **Think Small to Unlock Carbon Capture's Big Potential**
   https://www.bcg.com/publications/2020/unlocking-carbon-captures-potential
6. **The impact of textile production and waste on the environment (infographics)**
   https://www.europarl.europa.eu/topics/en/article/20201208STO93327/the-impact-of-textile-production-and-waste-on-the-environment-infographics
7. **Roland Berger buys Amane as water moves up the agenda for strategy consultants**
   GWI Issue March 2024

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.

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