SIGNINA CAPITAL AG

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Water Infrastructure

Quarterly Water Report
Q1 2018

I. Current Project Descriptions

Wastewater plant, 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.

Hydropower, 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.

II. Regional Market Information

Water Industry 2017 M&A

With the engineering sector consolidating, and an unusually large number of infrastructure assets changing hands, last year was a big year for dealmakers – topped, of course, by the deal of the decade: Suez's acquisition of GE Water[1]

Two big deals dominate the annual table of the top 30 water deals for GWI: Suez/GE Water and Jacobs/CH2M. The odd thing is that the two deals were motivated by seemingly opposing strategies. Suez wanted to buy GE Water because it wanted more exposure to the industrial market, while Jacobs bought CH2M because it wanted the reverse: to build its government revenues, having become overweight in the oil and gas sector. The top 30 water deals were as follows:

Asset	Buyer	Seller	Price	Multiple
GE Water & Process Technologies	Suez (70%) / CDPQ (30%)	General Electric (GE)	$3,400m	-
CH2M Hill Companies	Jacobs Engineering Group	Employee-owned	$3,270m	10.1x adjusted EBITDA
Valves & controls business	Emerson Electric Co.	Pentair plc	$3,150m	1.9x sales; 14.1x EBITDA
WS Atkins	SNC-Lavalin	Publicly quoted	$2,700m	1.1x sales; 11.5x adj. EBITDA
Waterworks division	Clayton, Dubilier & Rice	HD Supply Holdings, Inc.	$2,500m	-
Affinity Water	Allianz (37%)/HICL (37%)/DIF (27%)	Morgan Stanley/Infracapital/Veolia	$2,090m	-
Aquarion Water Company	Eversource Energy	Macquarie (55%) / bcIMC (45%)	$1,675m	14.0x net income
26.3% of Thames Water	Borealis/Wren House/Kuwait IA	Macquarie	$1,480m	2.1x sales; 5.9x EBIT
70% of Odebrecht Ambiental	Brookfield Partners/Sumitomo	Odebrecht	$908m	1.9x sales; 5.0x EBITDA
DIF Infra. II fund (inc. Delfluent stake)	APG Asset Management N.V. (ABP)	DIF	$800m	-
20% of Chongqing Derun	Shenzhen Expressway Company	Chongqing Water Asset Management	$640m	2.7x pre-tax profit
Rockwater Energy Solutions, Inc.	Select Energy Services, Inc.	Privately held	$610m	-
4.38% of Coway	Various	MBK Partners	$331m	3.8x sales; 22.9x op. income
17.16% of Evoqua Water Technologies	Various (initial public offering)	AEA/bcIMC/Pictet/Others	$329m	1.7x sales; 12.0x adj. EBITDA
Anvil International	J.P. Morgan Chase & Co.	Mueller Water Products, Inc.	$315m	0.9x sales; 11.8x op. income
Innovyze	EQT Mid Market US	Stantec	$270m	8.6x sales; 16.3x EBITDA
Acuatico Pte. Ltd.	Moya Holdings Asia Limited	Avenue Luxembourg/Hagerty	$245m	9.5x pre-tax profit
Crescent Companies, LLC	Rockwater Energy Solutions, Inc.	Privately held	$207m	-
61.2% of Opus International	WSP Global Inc.	UEM Edgenta Berhad	$195m	0.6x sales; 10.0x op. EBITDA
Shimmick Construction	AECOM	Privately held	$175m	0.6x sales
50% of IDE Technologies	Clal/ITU/Ayalon/Avshalom Felber	Israel Chemicals Limited	$167m	1.9x sales; 37.1x net income
Wastewater system	American Water	City of McKeesport, PA	$159m	-
2.389% of Thames Water	Fiera Infrastructure/DesJardins Group	SAS Trustee Corp.	$153m	4.1x sales; 11.3x op. profit
Project Alpha WWTP	Northern Ireland Water	Kelda Group	$144m	-
50% of Galaxy Newspring Pte. Ltd.	Yunnan Water	Hyflux	$137m	6.6x sales
42.25% of PT Nusantara Infrastructure	Metro Pacific Investments Corporation	PT Matahari Kapital Indonesia	$134m	-
32.7% of Longjiang Env. Protection.	SIIC Environment Holdings	Ts. Tongfang/Changzhou Wei Run	$125m	-
Non-household retail water business	Castle Water	Thames Water	$123m	-
12.9% of Anhui Guozhen Env. Prot.	Anhui Railway Development Fund	Marubeni Corporation	$108m	0.5x sales
Hebei Huaguan EP Sci. & Technology	Beijing Capital	Zhongming Property	$107m	-

Source: GWI WaterData

[1] GWI. Vol 19, Issue 1 (January 2018)

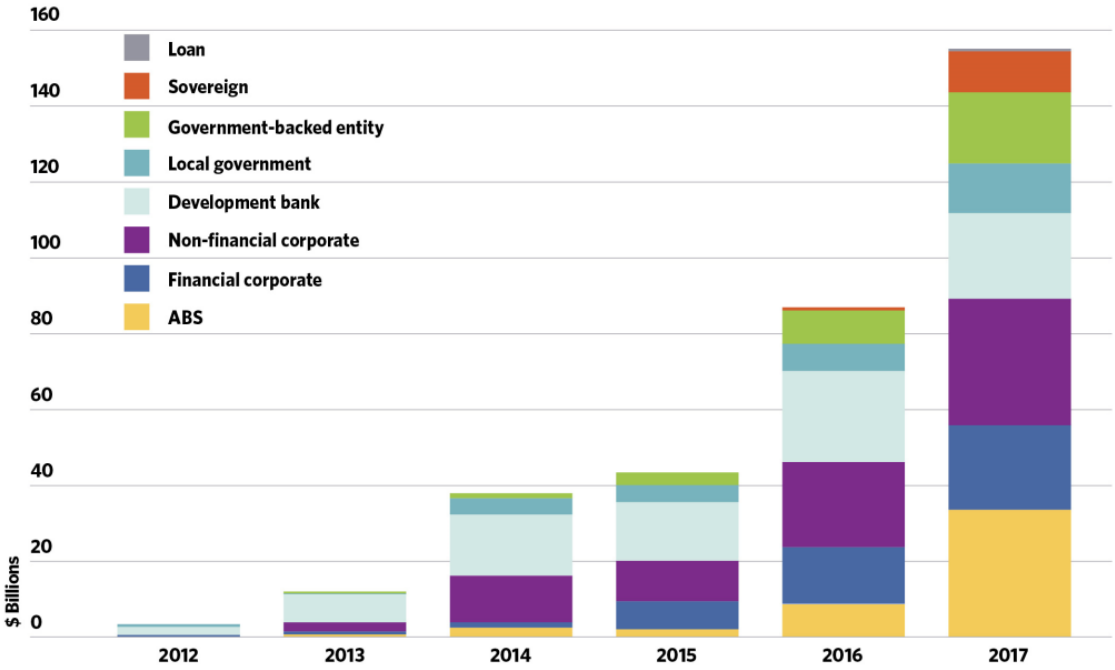
Green Bonds – 2017 Highlights[2]

Climate Bonds Initiative released their 2017 review of the Green Bonds market. It was yet again a record year raising over $155bn which is a significant increase from the final figure of $87bn raised in 2016. Furthermore all targets were met from their 2016 review[3]:

1. More issuance from sovereign and sub-sovereign issuer
2. Policy developments will push green finance even further
3. Over-subscription of green bonds and tight pricing will remain

The highlights of 2017 consisted of:

- **1500+** issues
- **239** different issuers, of which over half are new issuers
- **37** countries of issuance on all 6 continents
- **$10.7bn** – the largest single green bond



The labelled green bond market growth

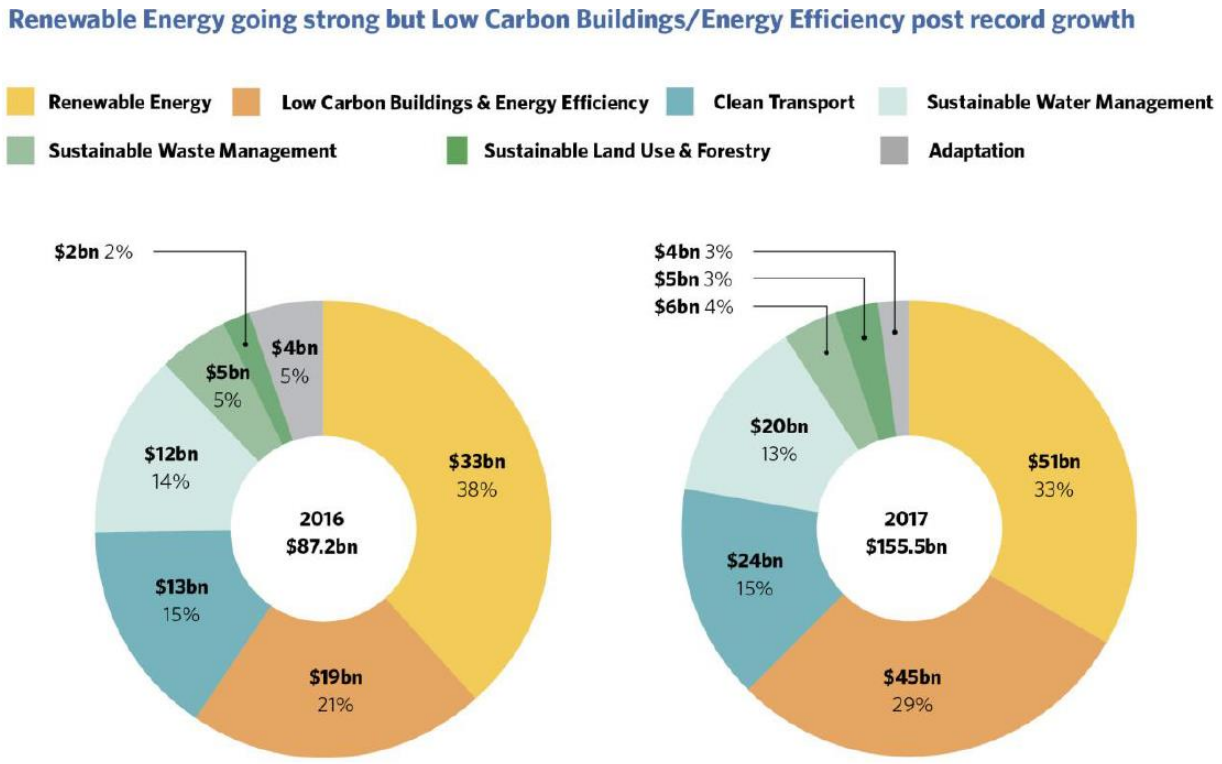
Just as important as the growth in the Green Bond total issuances has been the development in the breakdown of sovereign issuances. The USA still dominates the market but there has been significant progress amongst other nations and emerging markets in the last couple of years with China, Mexico India and other emerging markets taking a giant leap in the past couple of years.

The progress globally has led to the start of unifying green definitions and standards. For example the ASEAN Capital Markets Forum launched the ASEAN Green Bond Standards[4]. In addition the EIB and China's Green Finance Committee published a white paper identifying differences between the European and Chinese green bond standards with a view to work on convergence in the future[5]. This shows that the trend is not only a regional incentive plan but with collaboration of regions becomes a global long term strategy.

On the other side of Green Bonds the highest investment continues to be in renewable energy. The second largest sector has been the low carbon building and energy efficiency. This has been predominantly pushed

[2] https://www.climatebonds.net/files/reports/cbi-green-bonds-highlights-2017.pdf
[3] https://www.climatebonds.net/files/files/2016%20GB%20Market%20Roundup.pdf
[4] http://www.theacmf.org/ACMF/upload/ASEAN_Green_Bond_Standards.pdf
[5] http://www.eib.org/attachments/press/white-paper-green-finance-common-language-eib-and-green-finance-committee.pdf

by companies such as Fannie Mae in the USA who have offered incentives such as lower interest rates for certified green buildings packaging them as MBSs[6]. Such incentives are low hanging fruit while other sectors such as Water and Waste management have significant investment but are not as simple as upgrading buildings:



In conclusion 2017 has shown significant growth but there is still great scope and need for initiatives and regulations to keep up the momentum going forward. To name a few items for 2018:

- Progress on common international standards – this is being addressed by the European Commission with the outline strategy was unveiled in March[7]
- Regulators will keep innovating – the regulators are currently getting up to speed with the industry aiming to create guidelines and incentives for Green Bonds
- More sovereign issuance from developed and emerging economies – based on the last couple of years, there are now case studies in place. This should lead to more issuances especially as government look to finance climate resilient infrastructure
- Double the volume aiming to reach between $250 – 300bn. Considering growth has exceeded 75% in four of the five years it does not seem unrealistic for more growth in the Green Bonds market. With clearer regulations and incentives there should be ample opportunity to exceed expectations in 2018

In Q4 2017 BDO reviewed and approved the "Signina Capital AG – Water Infrastructure Green Bond Criteria Report" [8] stating it passes the Green Bond requirements and adheres to all the ICMA principles.

[6] https://www.fanniemae.com/multifamily/green-initiative-green-building-certifications
[7] http://europa.eu/rapid/press-release_IP-18-1404_en.htm?locale=en
[8] Signina Capital AG – Water Infrastructure Green Bond Criteria Report

Trump Infrastructure Plan[9]

Trump announces $1.5 trillion infrastructure plan

Trump announced the plan in a 53 page document. It included $200 billion in federal funding over the next 10 years with the aim to incentivise another $1.3 trillion from state and local governments as well as private firms. The money will be spent according to the following breakdown:

- Infrastructure Incentive Program – $100 billion for direct grants to local governments to assist investment from local and private investment infrastructure projects
- Rural Infrastructure Program – $50 billion allocated to projects in rural areas
- Transformative Projects Program – $20 billion provided for ambitious high-risk infrastructure projects that might otherwise struggle to secure private sector investment
- Miscellaneous Existing Infrastructure Programs – Approximately $30 billion is being provided in different sectors to continue and enhance current programs. This includes the expansion of Private Activity Bonds in the public sector market

The plan is a significant change from typical infrastructure spends. Federal government usually covers the bulk of the cost, but under Trump's plan over 80% of the financial burden would be undertaken by local governments and private investment.

From a non-funding perspective the focus is to streamline the approval process for bigger projects to two years from 5-10 years. This plan would allow one agency to make a final decision on permitting. The White House is calling this approach the "one agency, one decision". It remains to be seen how such change would be implemented in reality as some of the red tape for such projects would be removed. Sceptics worry that this would lead to environmental regulations being overlooked; but at this stage there is no firm idea on how it will turn out.

There were several other items addressed in the plan. To name a few:

- Create a fund to repair infrastructure on public lands such as parks and forests. It will use money generated from "mineral and energy development on federal lands and waters"
- Allow workers with out of state trade licenses to work on new infrastructure projects
- Expand the use of toll roads and loosen restrictions of the use of revenues from them
- Expand the use of Pell grants to help pay for post-secondary programs

While the plan makes for interesting reading it remains to be seen how the plan and approval process will unfold. It is unlikely to be passed through Congress in its current form and there will likely be a lot of discussions and adjustments before anything is pushed through.

U.S. Hydro

U.S. hydro can quintuple its value with proper market structure[10]

The Brattle Group undertook an extensive study in the US Hydro market releasing the following report on their findings: "Maximizing the Market Value of Flexible Hydro Generation" [11] HydroWorld summarised the report:

In summary opportunity exists in the U.S. to increase the market value of hydro storage plants by 200% to 500%. The report says that with resource flexibility becoming more important on the grid, pumped, reservoir and pondage hydro plants can offer a significant value as the major provider of system flexibility.

With the resource mix changing rapidly from 2010 to 2020, thanks to both retirements and additional generation, flexible resources are needed to operate with, in particular, an increasing share of variable generation.

[9] https://www.politico.com/f/?id=00000161-8a9d-d53a-a5f5-bffd597b0000
[10] https://www.hydroworld.com/articles/2018/04/report-u-s-hydro-can-quintuple-its-value-with-proper-market-structure.html
[11] http://files.brattle.com/files/13659_maximizing_flexible_hydro_market_value_3-29-18_final.pdf

The report points to one important complement: batteries and flexible hydro. Flexible hydro plants can be used, through daily and seasonal storage, to meet peak loads and to help integrate large baseload plants (nuclear, coal and run-of-river hydro). In addition, battery storage is gaining momentum, with 50 GW of battery storage potential at a cost of $350 per kWh installed.

The report points to hydro storage capacity of 13.6 GW from pumped storage and 25.5 GW of conventional hydro operating in organized wholesale markets in the U.S., along with 60 GW operating outside of organized markets in the northwest and southwest. The report indicates four constraints to realizing the potential value of hydro plants in today's energy and ancillary services markets:

- Market limitations (design, rules, optimization systems, etc.)
- Bidding and operational practices
- Resource constraints (pumped storage, pondage and reservoir hydro)
- Transmission congestion

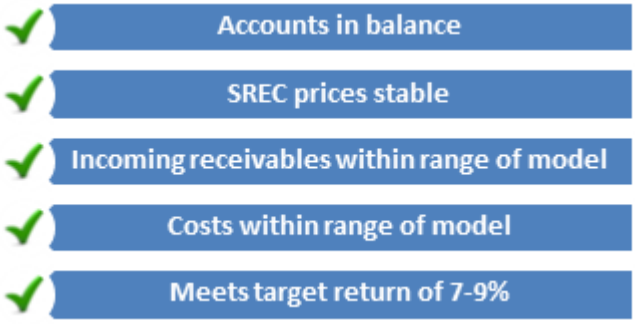
In a case study of a pumped storage hydro plant operating in an RTO (regional transmission organization) market, the report indicates that compared with historical performance of energy and ancillary services market net revenues of $10 per kilowatt-year, this plant has the capability of revenue of $30 per kilowatt-year through increasing optimization to arrive at optimized market performance.

III. Ongoing Projects

Wastewater plant, NJ:

The energy creation for Q1 2018 was in line with expectations. The project is running smoothly with no issues to address. A new PPA was signed in Q1 for the next year providing in excess of $300k for 1,500 SRECS.

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

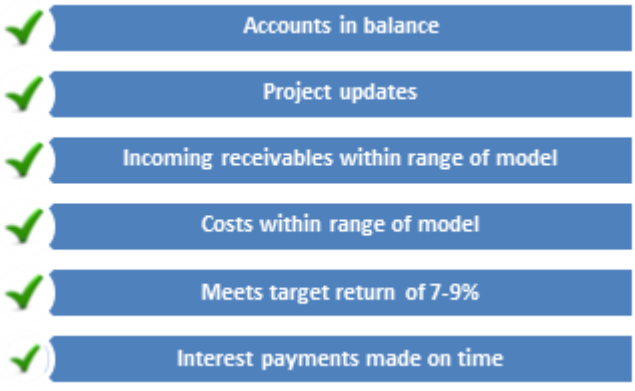


Sustainable Sewerage, Ontario

The last quarter has seen a combination of consolidation along with more potential opportunities arising in the coming months. The operating contracts obtained from Koester in a security agreement have supplied a strong revenue stream over the coming years. All the big contracts and most of the smaller contracts have been paying for Koester services as expected. The only small snag has been some delays in payment by some sites which is normal for the industry. The aim in 2018 has been to try streamlining payments to reduce late payments as far as possible.

Since 2017 the contract list has grown with the new contracts providing extra security in the loan agreement. There continues to be further opportunities for operating contracts where many sites have further needs for waste water upgrades or full solutions. Clearford and Koester believe there are great synergies between the two companies that will assist in obtaining new contracts in the design and build elements of the businesses. This becomes the next phase in the consolidation process of the industry.

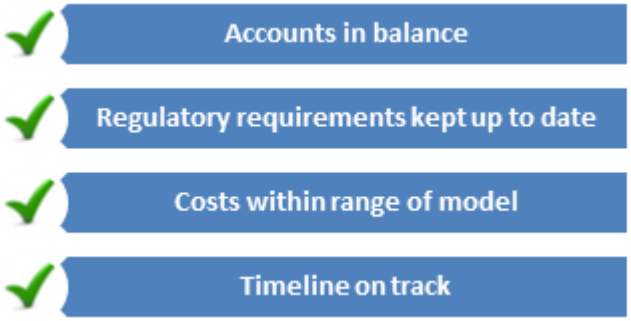
- Maintain monthly communication with Kevin Loiselle and Mark McGuire regarding projects
- Document any changes to the investment expectations



Hydropower, Illinois

Similar to last quarter there has been little to update. The site is still progressing but with a slight delay and smaller construction work has been conducted in the Q1 2018. The main development is that prices for electricity have started to trend upwards significantly and we will explore further financing rounds on debt level, as financing the last round is very interesting with higher pricings. We are also conducting our market research with our electricity traders in order to establish, when it is the right time to lock in the current pricing. We have seen Megawatt-pricings go from USD 28 to about 45 an hour, which makes a huge difference to how our financing should be structured.

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



IV. Latest Developments

Latest Actions

There are three main areas where exciting future developments are occurring:

1. The consolidation process in Canada for sustainable sewage solutions and operating contracts continues. There are many small contracts from small operators that could be available. However like last quarter these opportunities take a long time to process with their small sizes actually increasing due diligence work. The aim remains the same; package a variety of contracts and add them to the current list.
   We will visit the Canadian sites in June to conduct a due diligence visit and a market update.

2. The New Jersey program remains the same. However there has not been a match to extend the project as many similar sites do not provide value. Similar to last quarter there are some wastewater build and operate plants requiring finance in the coming months. They are predominantly in New York and are still under investigation to complement the New Jersey site.

3. The New Jersey program has led to new potential in Texas in a different sector. The oil and gas industry is booming in Texas but the tipping and dumping of the waste in the oil industry remains a big concern which is not overly addressed. There are many landfarms which act as landfill sites for the cutting and mud waste from the oil extraction procedures. Many sites do not do anything with the waste. However there is a growing trend to start recycling the waste (centrifuge can be used to separate the mud into water and hydrocarbons). This concept has great potential in recycling water and minimising waste; thus there are some site currently being investigated from both a conceptual basis and a financial viability basis.

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