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Opportunity Zone Infrastructure: The Case for Middle Market Solutions

Local infrastructure projects have not benefited from the Opportunity Zone program to the same extent as real estate ventures, but there is a great and growing need to finance middle market infrastructure solutions that serve municipal, utility and business customers in communities across the country

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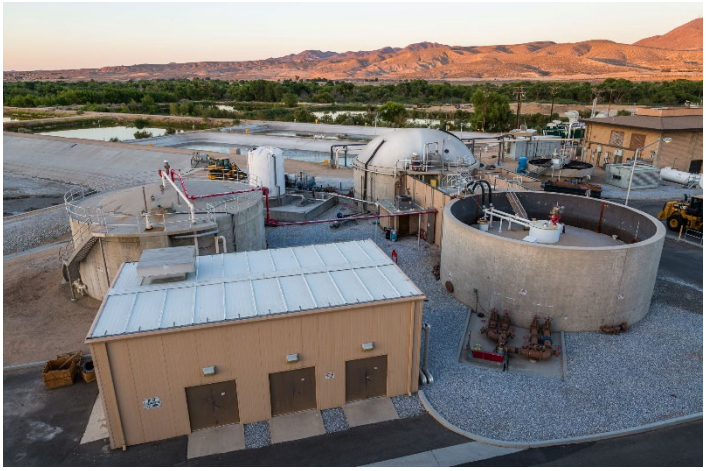
Upon introducing the "Investing in Opportunity Act" in 2017, Senators Cory Booker (D-NJ) and Tim Scott (R-SC) issued a joint statement describing their Opportunity Zones ("OZ") program idea as "a new approach to connecting struggling communities with the private investment they need to thrive … [by] dramatically expand[ing] access to the capital and expertise needed to start and grow businesses, hire workers and restore economic opportunity in struggling communities."[1] In separate statements at the time, Senators Booker and Scott both indicated that they hoped Qualified Opportunity Funds ("QOFs") formed to invest in Opportunity Zones



Project Golden Bear is a middle market waste-to-energy project in an Opportunity Zone in Southern California.

would prioritize investment in "local infrastructure projects" as well as businesses and real estate.[2]

Consistent with the Senators' call to action, the American Society of Civil Engineers ("ASCE") released its latest Infrastructure Report Card in 2017, giving the U.S. a nearly failing grade ("D+") and indicating that American infrastructure was generally in "poor to fair condition and mostly below standard, with many elements approaching the end of their service life."[3] At the time, the ASCE estimated the United States would need to invest $4.6 trillion by 2025 in order to improve its infrastructure to a "B" grade of "adequate for now," but still short of an "A" grade that would indicate it is "fit for the future."

The ASCE's 2017 estimate did not account for the rapidly accelerating demands related to the Energy Transition, the 5G Revolution (or communications infrastructure more broadly) and other global trends, but was largely focused on what would be required to repair or replace outdated infrastructure that was originally constructed during the major public building programs of the mid-20th century. Since then, significant population growth and internal migrations have transformed U.S. demographics and the country's infrastructure needs. For example, substantial investment in municipal wastewater-treatment facilities followed the passage of the Clean Water Act in 1972, but at the time the U.S. urban population had been stagnant at approximately 74% of the total population for more than a decade and this factored into capacity planning decisions.[4] Since the 1980s, migration back into cities has boosted the U.S. urban population to 84% of the total and the Environmental Protection Agency ("EPA") projects another 56 million new users will tap into America's wastewater systems over the next 20 years.[5]

Similar demographic trends have placed a strain on aging and capacity-constrained municipal infrastructure at a time when long-term underinvestment in these critical systems has been highlighted by incidents such as the drinking water crisis in Flint, Michigan.[6] The ASCE does not break out its estimate of investment need by census tract, but it should come as no surprise that much of Flint was designated as an OZ.

To date, the OZ program has not delivered on the Senators' aspirations for its ability to mobilize capital to meet the infrastructure challenges of our nation's communities of greatest need. According to recent data from Novogradac, some 580 QOFs have raised approximately $12 billion of capital for investment into OZs through September 1, 2020.[7] Nearly all of this QOF capital appears destined for real estate investments, with only $444 million earmarked for investments in operating businesses and just $320 million targeted for investments in infrastructure, mostly renewable power.

There are several factors that contribute to this imbalance, but one reason is how the real estate, private equity and infrastructure investment management industries, respectively, have each responded to the OZ program. Whereas many national real estate investment firms such as Bridge Investment Group, Brookfield Asset Management, CIM Group and others have formed large QOFs, no private equity firms of a similar profile have so far attempted to do so, while only two institutional

infrastructure managers are known to have formed QOFs: Greenbacker Capital and North Sky Capital.[8]

At first glance, this is surprising. The OZ program provides private investors with certain capital gains tax benefits to incentivize long-term location-specific investments, and the OZ regulations provide clear guidelines for how investments in physical assets can comply. Therefore, the OZ program should be well-aligned with the infrastructure asset class, which is defined by long-term, location-specific investments in physical assets that deliver essential services to municipal, utility and business customers.

Anecdotally, many large infrastructure managers have been skeptical OZ-oriented strategies would be able to scale to absorb asset growth of $1 billion or more. As a result, many were hesitant to expend the upfront QOF-structuring costs and allocate internal resources to raise dedicated OZ funds. And this makes sense: as demand for infrastructure investments has grown among large pension funds and other investors seeking long-term, liability-matching investments, many infrastructure managers have oriented their businesses to serve that audience. But as tax-exempt entities, pension funds typically cannot benefit directly from the OZ program's tax incentives, which generally require investors to have a U.S. tax profile. As such, it is understandable why few infrastructure firms would feel motivated to create QOFs.

In addition, the OZ regulations make it difficult for QOFs to invest in the type of stable operating assets preferred by core infrastructure buyers; rather, the OZ program is best suited to greenfield-oriented investment theses, meaning new-build projects or existing assets requiring substantial improvement through large capital expenditures as a proportion of the total investment. Lastly, the idiosyncratic contours of the OZ map, dictated by Federal census tracts and various state economic-development policy objectives, doesn't easily lend itself to large-cap infrastructure investments, particularly in popular sectors such as communications, midstream energy, or transportation, where assets can frequently span large geographic footprints.

For these reasons, we believe that creating a viable Opportunity Zone infrastructure strategy requires three preconditions:

1.) **U.S. taxable investors** with realized capital gains looking to avail themselves of the OZ tax benefits;

2.) **A middle market orientation** with an emphasis on smaller greenfield projects in the U.S.; and

3.) **Sector expertise and developer relationships** in power, waste, water or other asset types where smaller project footprints may fit more easily within the boundaries of specific OZs.

Project Golden Bear, the first investment in North Sky's OZ infrastructure fund, demonstrates these characteristics and highlights the power of the OZ program to help finance infrastructure projects in low-income communities. The 2020 investment took form as an $18 million preferred equity commitment to construct a facility that captures

waste methane currently produced and "flared" (burned) into the atmosphere by a municipal wastewater-treatment plant and converts it into a renewable natural gas ("RNG"). Once complete, the facility will produce approximately 320,000 mmbtu of RNG per year, sold under a long-term contract with a large regulated gas utility.

The investment solves a challenge for the utility, which sought additional RNG to comply with California's stepped-up environmental mandates. It also helps to process 200 tons of waste daily that would otherwise go into landfills. The facility anaerobically digests food waste and wastewater sludge to recover the methane for RNG. Project Golden Bear provides a market-based solution to upgrade a municipal wastewater facility at a time when most state and city budgets are facing fiscal constraints and helps create multiple new revenue sources for the municipal wastewater-treatment authority.

Looking beyond Project Golden Bear, similar waste-to-energy and waste-to-value projects provide an opportunity for middle market infrastructure investors while addressing our country's pressing waste challenges.

The Case for Waste

According to the EPA, the United States produced approximately 292.4 million tons of municipal solid waste in 2018.[9] Of this total, fully 50% (146.2 million tons) ended up in landfills, while only 23.5% (69.0 million tons) was recycled and just 11.8% (34.6 million tons) was used in energy production, mostly combustion for power-generation purposes.

Landfills account for 17% of U.S. methane emissions, which represented approximately 10% of total U.S. greenhouse gas emissions in 2018.[10] The EPA estimates that the comparative impact of methane is "25 times greater than CO_2," underscoring the need to address these emissions.[11] Much of this waste methane can be captured and processed into RNG as in Project Golden Bear, or converted directly into electricity as one of North Sky's prior funds did in an LRI project in Washington state. However, fewer than 1,000 of America's nearly 14,000 active and legacy landfills have gas-capture facilities today.[12] Plentiful project sites with proven gas supply would suggest a large investment opportunity, but any given landfill gas project tends to be fairly small and requires limited capex to execute. For instance, North Sky's LRI investment required less than $15 million in capital expenditures. It's these characteristics that make landfill gas projects a distinctly middle market opportunity. Many landfills sit within Opportunity Zones and, while the historical factors contributing to this are coming under increasing scrutiny, investment activity is generally aimed at improving these sites, remediating environmental threats and adding to the local tax and employment base.

In recent years, growing awareness and concern about landfill capacity and methane production have led an increasing number of states to tighten regulations around what can be landfilled. Many of these regulations also mandate that organic waste, in particular, is to be diverted to other uses. For example, California Senate Bill 1383, which was signed into law, stipulates that 75% of organic waste must be diverted to alternate uses by 2025. A component of Project Golden Bear involves upgrading the

municipal wastewater treatment facility to receive and process such diverted waste into additional feedstock. New York, Massachusetts, Connecticut, Rhode Island and Vermont have similar regulations in place, as do several large municipalities such as Portland, Oregon and Austin, Texas. Other states have bills working through their legislative processes. New infrastructure is needed to receive the diverted organic waste and, again, this represents a distinctly middle market opportunity given many such projects will inevitably be small and local, located mostly at existing municipal waste management facilities and tapping into existing logistics networks. An overly large waste-processing facility runs the risk of having to source feedstock waste from far distances, increasing supply- and transportation-cost risk. One recent project, for instance, located in an Opportunity Zone was seeking less than $10 million of capex to create a facility to process organic waste diverted under California SB 1383 and turn it into feedstock that would be sold under a long-term contract to an existing waste-to-power plant. This investment would be too small for many larger infrastructure funds.

Agricultural waste, including biomass, inedible crop waste and livestock manure is another environmental concern in need of infrastructure capital investment. The underwriting challenge with these kinds of projects is they tend to have small, private counterparties, in contrast with wastewater or liquid waste projects. However, certain regions of the U.S. incentivize these types of projects through state-wide mandates for energy specifically sourced from agricultural and livestock waste, providing regulatory support for greenfield investment. While wastewater and liquid waste projects tend to be located near population centers, agricultural waste projects can be located in rural areas, many of which are in OZ's removed from metropolitan areas. This is another sector drawing interest from middle market infrastructure investors.

Conclusion

The United States needs significant capital investment in its infrastructure to remain globally competitive. Much of this infrastructure is required to serve local needs for essential services – such as electricity, waste management and water – and solve major challenges, such as America's waste problem. However, small project sizes require middle market solutions and the Opportunity Zones program is a compelling financing tool available to project developers and their municipal, utility and business customers.

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[2] See above and https://www.scott.senate.gov/media-center/press-releases/senator-scott-introduces-the-bipartisan-investing-in-opportunity-act
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