Renewable energy bond

Renewable energy bond

Renewable energy finance: Green bonds highlights green bonds as an innovative ...

Socially responsible investing, marketed under the moniker "ESG" (short for environmental, social and governance), is a huge and growing business. In 2015 global ESG-related assets were $2.2 trillion, according to PwC, growing to $9.4 trillion in 2020 and nearly doubling in 2021 to $18.4 trillion. Sustainable bonds are a big slice of this pie. Globally, over the last two years, an average of more than 400 bonds have been issued per quarter, totaling over $1.7 trillion, according to the London Stock Exchange"s Refinitiv group. European issuance is more than double that of the U.S., but a wave of new green bonds is coming here.

One particularly vibrant corner of this market: ESG-certified municipal bonds, such as those designed to help local communities prepay for decades" worth of green electricity. According to Monica Reid, the founder of Kestrel, which charges "a fraction of a basis point" of a new bond deal"s face value to verify new issues as "social," "green" or "sustainable," there have been $85 billion worth of these municipal bonds issued in the U.S. in the last two years. Reid"s Hood River, Oregon-based team of 27 analysts and engineers certified nearly a third of them.

"Not everything is green or sustainable or socially beneficial because it"s financed with municipal bonds," Reid says. "The muni market is also where coal ash dumps are financed, ports and airports. It"s where turnpikes and toll roads are financed. We are very discerning. Internally we have a do-no-harm criteria. If repayment is from oil royalties or gambling revenues, that"s a problem."

Like so many environmental trends, this one started in California. Over the past 14 months enormous Wall Street banks such as Goldman Sachs and Morgan Stanley have persuaded ultra-green electric power agencies in Northern California to hand them roughly $2.7 billion, with $2 billion more in the works. The power agencies raise that upfront cash by selling tax-free municipal bonds of the type Kestrel certifies. In return, the banks so far have promised to deliver into the California power grid 2.2 million megawatt hours per year of "green" electricity, sourced from solar, wind and hydropower.

There are many winners. The banks get cheap loans to spend on whatever they want. Californians, like the residents of 15 other states and the District of Columbia, get to pick their provider and can choose to put their money toward greener power. And investors can hold the bonds comforted by the knowledge that they have invested in something not only green but backed by a big bank"s guarantee.

The loser? Uncle Sam. If Morgan Stanley issued its own similarly structured corporate debt to raise funds, it would likely pay 6% or so interest, subject to federal tax. But when Morgan raises cash via a municipal prepaid green electricity deal at a 4% interest rate, it incurs no federal tax. On $3 billion in green power munis so far, that would equate to some $50 million a year in forgone tax revenue. Maybe it"s worth it. After all, it"s a model that could quickly spread across the nation and help underwrite the development of enormous amounts of greener energy. But it also could add up to billions of dollars in hidden annual subsidies to rich Wall Street banks. That might not play well in Peoria.

California is one of 10 states that have enabled the creation of local electricity-purchasing cooperatives called Community Choice Aggregators. They have names like Marin Clean Energy and Silicon Valley Clean Energy, and were formed to enable Californians to buy power marketed as 100% "green." In recent years these co-ops have entered multidecade contracts directly with the owners of solar fields and wind farms to buy their electricity output.

But these electric co-ops are utterly unequipped to manage a host of complex contracts with financial counterparties. So last year the Marin co-op joined with sister entities in places like Silicon Valley, Berkeley and Carmel to set up what"s known as a conduit issuer, the California Community Choice Financing Authority (CCCFA), essentially a shell agency with the power to issue tax-free municipal bonds.

In the last 14 months, CCCFA has issued $2.7 billion in three different Clean Energy Project Revenue Bond deals, with tax-exempt coupon rates of 4%, courtesy of Morgan Stanley and Goldman Sachs. The money goes toward prepaying for 30 years of renewable electricity. Prepaying comes with a discount. CCCFA members, for example, expect to save $7 million per year on their electricity purchases.

Of course, large prepayment for future commodity purchases is a Wall Street banker"s dream. A close look at the California bond documents reveals an impressive feat of financial engineering involving a maze of entities, commodity swaps and derivatives that effectively transform billions of green bond proceeds into a tax-exempt source of funding and trading profits for Morgan Stanley and Goldman Sachs.

On Wall Street, tax-free prepaid revenue bonds have long been associated with natural gas. In fact, nearly 95% percent of the estimated $60 billion that has been issued since the 1990s has been to purchase that fossil fuel. The idea was that small municipalities in places like rural Wilcox County, Alabama, or Omaha, Nebraska, would band together to sell tax-exempt bonds and use the proceeds to reserve a supply of natural gas at the same discounted prices that large city power systems paid.