GBN Bulletin - February 2020

2020 is set to be a big year for green banks, with new announcements, new transactions and new green banks being developed globally.

**New transactions:** Green Bank Network (GBN) members have announced a number of new transactions. CEFC Australia has completed new transactions in advanced battery control systems and the circular economy, while NY Green Bank has committed new financing in energy efficiency. Green Investment Group has announced new transactions in offshore wind, and Connecticut Green Bank announced a partnership with CESA on solar in low-moderate income communities. Rhode Island Infrastructure Bank announced a new refinancing transaction focused on clean water projects, saving money for local municipalities and utilities.

New GBN members EERSF (Bulgaria) and Tata CleanTech Capital Limited (India) have made recent new investments, including efficiency upgrades to athletic facilities in Bulgaria, and new transmission lines in Rajasthan, India, respectively. GBN members to date have used over $15 billion in commitments to mobilize over $50 billion in total investment in green infrastructure. Read more about recent member transactions below.

**Green bank growth:** At COP25 in Madrid, green banks and proponents gathered for an event hosted by the Green Bank Design Platform, focused on the creation of green banks in new jurisdictions around the world. Speakers from Brazil, New Zealand, Cambodia, Rwanda, India, South Africa, Mongolia and more discussed their individual approaches to setting up green banks.

In the United States, Congresswoman Debbie Dingell and co-sponsors introduced the National Climate Bank Act of 2019. At the state level, the governors of California and New Jersey announced plans to create green banks and dedicated clean energy finance capacity in their states.

CGC has released a new white paper on precedents for the National Climate Bank in the US. NRDC has released a new profile of Tata CleanTech Capital Limited.

Happy reading,

GBN Team (CGC and NRDC)
Table of Contents:

1. Recent Transactions

2. Events

3. Reports and White Papers

Recent GBN Member Transactions

Clean Energy Finance Corporation

In a move to support cleaner greener homes in Australia, the CEFC is working with customer-owned lender Bank Australia to spearhead the construction of market leading, energy efficient housing.

The CEFC has committed A$60 million to the Bank Australia Clean Energy Home Loan which fills a gap in the market by providing a discounted interest rate to builders and new home buyers who adopt sustainable design principles from the start of a project.

Eligibility requirements are aimed at ensuring the new homes are materially better than minimum construction standards. Over time, loans will be extended to include owners of existing homes undertaking green home improvements. See the green home loan fact sheet for more information on the program.

Other big news for the CEFC involves the launch of the A$100 million Australian Recycling Investment Fund. The Fund will encourage increased investment in clean energy technologies that support waste recycling leading to reduced landfill related emissions. Waste plastics, paper, glass and tyres will be a particular focus. The CEFC investment commitments through the Fund will align with the key elements of the circular economy which involve avoiding waste, improving resource recovery, increasing the use of recycled material, better managing waste materials and improving information to support innovation and guide investment.

The CEFC expects to invest in larger-scale commercial and industrial projects, typically requiring A$10 million or more of CEFC debt or equity capital. See the Australian Recycling Fund fact sheet for further details.

Separately, the CEFC has increased its stake in Relectrify, investing a further A$2.5 million in the Melbourne-based developer of advanced battery control solutions. Relectrify has just launched groundbreaking Battery Management System (BMS) + Inverter storage technology that significantly increases storage and reduces the cost of new batteries as well as giving new life to old batteries. The Relectrify BMS +Inverter technology could increase battery storage time by as much as a third and reduce costs by up to half compared to existing market-leading battery offerings. The CEFC's Relectrify case study includes a video explaining the technology.

Other recent CEFC transactions include a commitment towards Australia’s second large-scale energy from
Connecticut Green Bank

On 7 October 2019, the Connecticut Green Bank and Greenho Enterprises announced the closing of a financial agreement that will allow for the instalment of solar photovoltaic roofing system at Stencil Ease – the largest specialty stencil manufacturing company in the United States. Located in Old Saybrook, CT, Stencil Ease will have 208 roof top panels installed at the 15,000 square foot facility for a total of 72kw that will generate over 90% of their business electricity needs.

Stencil Ease is the first commercial business in their town to use the Commercial Property Assessed Clean Energy (C-PACE) program, which helps property owners make energy upgrades immediately. C-PACE allows property owners to install energy efficiency upgrades or renewables on their buildings without upfront costs using financing that is repaid through the town’s property tax billing system as a benefit assessment, akin to a water or sewer assessment. The project’s gross installed cost will be $215,000, and the expected average annual energy cost savings over 20 years is estimated at about $20,000 a year.

The Connecticut Green Bank, as part of The Clean Energy States Alliance, will participate in a wide-ranging initiative to accelerate the development of solar projects that benefit low-and-moderate income (LMI) households and communities. The “Scaling Up Solar for Under-Resourced Communities Project”, which started on 1 October 2019, is being supported by a three-year funding award of $1.1 million from the US Department of Energy Solar Energy Technologies Office.

In November, a special offer for the Smart-E loan, which finances energy improvements for owner-occupied 1-4 family properties, was announced. Administered by the Green Bank in partnership with nine local lenders (community banks, credit unions and a community development financial institution), the Smart-E loan now allows asbestos and mold remediation to be financed in full (up to $25,000) when completed with an Energize CT Home Energy Solutions (HES) program assessment or other energy-related improvements.

Read more about Connecticut Green Bank’s latest transactions and developments here.

Energy Efficiency and Renewable Sources Fund

The Energy Efficiency and Renewable Sources Fund (EERSF) of Bulgaria, one of the newest members of the Green Bank Network, has announced new transactions, continuing its leadership in green investment in Bulgaria. Recent EERSF transactions include:

On 16 November 2019, EERSF announced a transaction with the Winter Sports Palace, a sports hall located in
Sofia, Bulgaria. The project was for energy efficiency retrofitting at the sports facility, and was implemented through an ESCO contract. The investment total was $645,000 most of which was provided to the contractor as a loan from EERSF.

EERSF also announced a transaction with a medical facility, the Gabrovo Diagnostic Center, located in the municipality of Gabrovo. The total project cost was $740,000, and the project lifetime is 20 years. The payback period is expected to be 6.4 years. The project was for an energy efficiency retrofit at the medical facility, including replacement of thermal insulation, efficient windows, boiler and other system upgrades. The project is expected to save 1,339 tonnes of CO2e/year over its lifetime.

See all latest transactions and media releases on the [EERSF website](https://www.eersf.com).

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**NY Green Bank**

NY Green Bank continues its commitment to growing clean energy investment, evidenced through the announcement in its latest quarterly report that as of September 30, 2019, NYGB has an Active Pipeline of potential investments proceeding to close of $828.4 million and total commitments of $791.7 million. NYGB investments support clean energy projects across New York State with total project cost of between $1.85 and $2.17 billion in aggregate.

In the quarter ended September 30, 2019, NYGB [closed a transaction sponsored by Saranac Lake Resort](https://www.nygb.com/press-releases/2019/10/07). The transaction, as part of NYGB’s larger portfolio, contributes to the primary Clean Energy Fund (CEF) outcomes of GHG emissions reductions, customer bill savings, energy efficiency, clean energy generation and mobilization of private sector capital. In turn, the CEF objectives support the New York State’s aggressive clean energy targets, including under New York’s Green New Deal which mandates a significant increase in the State’s Clean Energy Standard with a goal of 70% energy generation from renewable sources by 2030 and carbon-free electricity by 2040.

The recent NYGB transaction is with Saranac Lake Resort, the first LEED Certified hotel in the Adirondack Park, located on the shores of Lake Flower, NY. NYGB’s $5.0 million preferred equity investment diversifies NYGB’s portfolio and presents an opportunity to increase market awareness of energy efficiency in the New Construction space. The facility will incorporate energy efficient technologies including HVAC, advanced lighting, improved building controls, in addition to stormwater management improvements and electric vehicle charging stations. The energy efficient measures are expected to reduce greenhouse gas emissions relative to design standards.


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**Green Investment Group**

The Green Investment Group (GIG), a specialist in green infrastructure investment, project development and portfolio management owned by Macquarie Group Limited (Macquarie), has announced new transactions, continuing
its global leadership in green investment and dedication to supporting the growth of the global green economy. Recent GIG transactions include:

In December, GIG completed the acquisition of Savion, one of the largest utility-scale solar and energy storage project development companies in the US. Savion’s project pipeline includes over 8GW of solar and energy storage development projects. The acquisition of Savion, combined with other key partnerships, have helped GIG form a solar and storage strategy with arranged PPAs for over 700 MW of solar energy assets.

In November, the inauguration ceremony for Taiwan’s first commercial scale offshore wind farm, Formosa 1, was held at Longfeng Fishing Harbor in Miaoli. The joint venture between Orsted, JERA, GIG and Swancor consists of the installation of two 4 MW turbines in 2016 and most recently 20 turbines totaling 120 MW. The 128 MW project will produce enough clean energy to power the equivalent of 128,000 Taiwanese households.

Additionally, Taiwan’s Formosa 2, which has been jointly developed by Macquarie Capital and Swancor Renewable Energy, reached financial close. The NT$62.4 billion project will be financed by a consortium of 20 international and local Taiwanese financial institutions. Once complete, it will displace an estimated 18,750 kt CO2e over its lifetime.

In Poland, GIG has acquired MW Zajączkowo Wind Farm from J-Power Investment Netherlands B.V. and Mitsui Renewable Energy Europe Limited. The 48 MW facility comprises of 24 Vestas V80 turbines and generates enough clean energy to power the equivalent of 38,367 homes.

Read more about GIG’s latest transactions and developments on the GIG website.

Rhode Island Infrastructure Bank

Rhode Island Infrastructure Bank (Infrastructure Bank), has announced new initiatives and transactions, continuing its leadership in clean water, clean energy, and climate resilient infrastructure investment in the state of Rhode Island. Recent initiatives and transactions include:

On 24 December 2019, the Infrastructure Bank announced the closing of a Clean Water State Revolving Fund and Drinking Water State Revolving Fund bond refinancing transaction, with a principal value of $153.8 million. These transactions save $7.8 million for 26 municipalities and utilities. The refinancing is part of a strategic effort by the infrastructure bank to take advantage of low interest rates and provide savings to customers.

“Through proactive balance sheet management, the Infrastructure Bank monitors interest rate environments to identify opportunities to lower our cost of borrowing,” said Jeffrey R. Diehl, CEO of Rhode Island Infrastructure Bank. “By refinancing existing debt at lower interest rates, we can provide savings to our customers and maximize the amount of capital available to finance additional infrastructure projects”

Over the last five years, the Bank has provided $33.4 million in savings to borrowers by refinancing existing debt at lower interest rates.

The Bank also recently announced the closing of its first new construction project financed through its
Commercial Property Assessed Clean Energy (C-PACE) program. Twain Financial Partners provided a $2.0 million loan as part of a complex capital stack that will turn a vacant lot into a five-story residential apartment complex. Over the financing term, the building is expected to reduce its carbon footprint by 6,373 metric carbon tons, the equivalent to the annual energy output of 763 Rhode Island homes.

See all the latest transactions and media releases on the Rhode Island Infrastructure Bank website.

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Tata CleanTech Capital Limited

Tata CleanTech Capital Limited (TCCL), one of the newest members of the Green Bank Network, has announced new transactions, continuing its leadership in green investment in India. A snapshot of fund raising and projects funded by TCCL for the quarter ended December 2019 is given below:

Fund raising: TCCL will proceed with a $75 million sustainable infrastructure on-lending facility from Asian Infrastructure Investment Bank (AIIB), China. The facility will be deployed by TCCL to finance renewable energy, power transmission & distribution and water infrastructure projects in India.

TCCL’s plans with respect to fund raising, investment ventures, lending opportunities and challenges faced in the renewable energy & other cleantech sectors are covered in more detail in a recent interview with Mr. Manish Chourasia, Managing Director of TCCL.

Recent Transactions: TCCL has committed funding of ~$130 million & collaborated with other financial institutions to help mobilize a total debt requirement of ~$210 million towards development of ~440 MW capacity of Solar ground mounted & rooftop projects across India. In these projects, the eventual power offtakers are either state utilities or reputed commercial & industrial players. The projects are being developed by leading renewable energy players in India.

TCCL also committed ~$30 million & collaborated with other financial institutions, to help mobilize a total debt requirement of ~$ 58 million towards a power transmission project which entails construction of transmission lines & sub-stations in the state of Rajasthan, India with a long term agreement with the state utility. The project developer, a leading power transmission player in India, will build 433 circuit kilometers of transmission lines and 16 substations with transformation capacity of around 600 MVA at voltage level of 132/220 KV across various regions of Rajasthan.

These projects will help to increase supply of renewable energy generation, lower carbon emissions, contribute to the Government’s ambitious plan of achieving 175 GW of RE capacity by 2022 and expand the transmission and distribution network in the country.

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Green Bank Events

Climate Week: Green Bank Design Platform Roundtable

During COP25 in Madrid, the Green Bank Design Platform organized an event titled “Green Banks for Country-Driven Climate Finance: Showcasing Country Ambition.”
During the event, hosted at the IDB pavilion, representatives from nine countries discussed their work to launch green bank initiatives in their respective countries. Representatives from India, Brazil, South Africa, New Zealand, Spain, Cambodia, Peru, Mongolia, Rwanda and Portugal all discussed their efforts in building local green finance institutions focused on catalyzing private investment.

**Convergence Blended Finance Training**

On 26 February 2020, Convergence Blended Finance will host an event in Nairobi, Kenya, focused on blended finance in Sub-Saharan Africa.

The interactive training and workshop will include presentations, lectures, group exercises and case studies by Convergence and third-party facilitators.

Sidonie Gwet, Project Lead – Rwanda, for the Coalition for Green Capital, will speak on the Green Bank model as a tool for mobilizing investment into green projects in Africa.

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**Reports and Whitepapers**

**Federal Financing via Independent Institutions: Precedents for the National Climate Bank**

In January 2020, the Coalition for Green Capital (CGC) released a new white paper on the U.S. National Climate Bank.

The National Climate Bank Act of 2019 forms an independent nonpartisan non-profit institution called the National Climate Bank to finance climate solutions at scale and bring clean energy investment to under-served areas. This institution will be capitalized with $35 billion in federal funds, and charged with investing capital in partnership with the private sector in order to get the most impact out of each public dollar. It will invest across sectors in a range of projects that reduce greenhouse gas emissions, lower costs, and increase access for consumers, including clean energy and supporting infrastructure, energy efficiency, clean transportation, and agriculture.

**Tata Cleantech Capital Limited: Driving Green Investment in India**

In December 2019 NRDC released a new profile of GBN member Tata Cleantech Capital Limited (TCCL).

TCCL is a joint venture, operating since 2013, owned 79.5 percent by the Tata Group, a major conglomerate headquartered in India, and 19.5 percent by the International Finance Corporation (IFC), a global development finance institution and part of the World Bank Group.
Group. TCCL is a little different from traditional green banks in that it is a private sector for-profit green financing enterprise, rather than a public entity. It aims to create and mainstream new financing markets in green sectors in India.

See more white papers covering the green bank model on the GBN website's Knowledge Center.