GBN Bulletin - July 2021

As countries move to rebuild their economies and the effects of the climate crisis are felt more acutely, the role of green banks in green economic recovery has become increasingly clear, with more governments moving to create green banks around the world. In the United States, the U.S. House of Representatives passed legislation to create the Clean Energy and Sustainability Accelerator (National Climate Bank) for third time in a year and the Accelerator was included in the budget resolution released last week, following its inclusion in President Biden’s American Jobs Plan earlier this year. On June 17th, the UK government launched its new UK Infrastructure Bank, with a core objective for driving the country to net zero. In June, representatives from 54 countries gathered virtually to discuss plans for creating green banks at the Green Bank Design Summit, organized by the Green Finance Institute (GFI), RMI, and the Natural Resources Defense Council (NRDC).

The Green Bank Network members remain busy, executing transactions in new sectors in renewables, low-income green housing, hydrogen, transmission infrastructure and more. Australia’s CEFC has made its largest investment to date, a A$295 million subordinated note to support a grid infrastructure upgrade to unlock renewable energy. The NY Green Bank released its annual impact report, highlighting up to $3.6 billion mobilized in local investment to date. Read more about latest member activities below.

Happy reading,
GBN Team (CGC and NRDC)
1. Recent Green Bank Transactions
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Recent Green Bank Transactions

Clean Energy Finance Corporation

Australia’s Clean Energy Finance Corporation (CEFC) has had a busy quarter, announcing a series of ground breaking investments in plastics recycling, hydrogen, grid infrastructure, green housing and more. In addition, the CEFC, which invests on behalf of the Australian Government, has released new reports and investment insights to encourage further investment in emissions reduction opportunities.

The CEFC has locked in its single largest investment, with up to A$295 million in capital to play an instrumental role in developing essential grid infrastructure. The investment will unlock renewable energy projects across three Australian states and accelerate the decarbonisation of the electricity grid. The CEFC investment has been made via an innovative subordinated note instrument which has contributed to the crowding in of further private sector debt to this critical project. The project will spur the generation of cleaner, cheaper and more reliable energy across South Australia, Victoria and New South Wales, leading to the creation of thousands of jobs in regional Australia.

In its first investment under the Australian Recycling Investment Fund, the CEFC has committed up to A$16.5 million in debt finance to a polyethylene terephthalate (PET) recycling facility in regional New South Wales. The new plant will recycle the equivalent of an estimated one billion PET bottles a year as well as create long term employment opportunities. The PET plastic will be used to produce more than 20,000 tonnes of new bottles and food packaging a
home loan finance as part of a A$750 million green mortgage-backed securitisation raised by Firstmac and backed by the CEFC and leading Japanese bank, Norinchukin. The homes will be among the most energy efficient in Australia, meeting or exceeding a 7 star rating under the Nationwide House Energy Rating Scheme (NATHERS). Qualifying green home loans will enable borrowers to benefit from a 0.4 per cent finance discount for up to five years on loans of up to $1.5 million. Construction loans will receive an interest rate discount of up to 1.58 per cent.

In another first, the CEFC has announced its first hydrogen-related investment, made on through its specialist Clean Energy Innovation Fund. Hysata, a new company created to commercialise innovative electrolyser production technology, has raised A$5 million to accelerate its development, led by global technology investor IP Group, along with the CEFC. Hysata’s advanced electrolyser technology has the potential to significantly improve the efficiency of hydrogen production, which is an important step in making hydrogen a more economic source of clean energy.

The CEFC has also released several research and thought leadership pieces in the past three months, helping to share information and insights with investors and interested sector participants. Featured pieces include the Australian hydrogen market study and Energising resource recovery: the Australian opportunity. Together with the Australian Renewable Energy Agency, the CEFC also released a report into Large-scale solar operations.

The CEFC received a positive market response to three short reports into its investment activities. These discussed the clean energy benefits for housing developments and greener infrastructure, as well as the role of the CEFC in contributing to delivery of the Australian Government Technology Investment Roadmap.

See the latest transactions and announcements on the CEFC website.

**Connecticut Green Bank**

In June 2021, it was announced that CastleGreen Finance announced the closing of a $13,767,000 Commercial Property Assessed Clean Energy (C-PACE) transaction. In partnership with Lexington Partners LLC, the property developer, and the Connecticut Green Bank, the program administrator for the state of Connecticut C-PACE program, this marks the largest C-PACE
provides the project developer with access to affordable, long term financing for qualifying clean energy and energy efficiency upgrades that lower energy costs.

In May, the Connecticut Green Bank has announced that the state’s C-PACE program surpassed $200 million in clean energy investment in local businesses. C-PACE is an innovative program that helps commercial, industrial and multifamily property owners access affordable, long-term financing to make smart energy upgrades to their buildings that can create immediate savings. According to PACENation, the non-profit industry group that promotes C-PACE financing, Connecticut’s C-PACE program is the most successful in per capita deployment when compared to other state programs.

In May, Berkeley Lab’s Electricity Markets & Policy Group, with support from the DOE’s Solar Energy Technologies Office, released a study on the Connecticut Green Bank and its solar leasing program in partnership with PosiGen. The research group at Berkeley Lab noted that the program “has successfully reached underserved customers and has reasonable repayment rates given the credit characteristics of the participants…and the Green Bank/PosiGen program reaches many more underserved customers than other PV financing programs in Connecticut.”

In April, the Connecticut Green Bank issued its second Green Liberty Bonds to retail and institutional investors, and sold out of nearly $25 million in bonds over two days. This builds upon a successful, award-winning 2020 issuance which sold nearly $17 million of bonds last July. With nearly $100 million in orders, demand this year was again greater than the supply of bonds could satisfy, showing the high-level of interest in supporting investment to confront climate change in Connecticut.

See all of Connecticut Green Bank’s latest transactions and announcements on the Connecticut Green Bank website.

**NY Green Bank**

NY Green Bank (NYGB) has released its inaugural annual Impact Report. The report summarizes an unprecedented year: in FY 2020-21, NYGB committed
year and had its strongest 2nd and 3rd quarters since inception. Cumulatively, this brings NYGB to over $1.3 billion of capital committed to clean energy and sustainable infrastructure projects in New York State, with up to $3.6 billion total project costs mobilized and $116.6 million of revenues generated to date. The report also highlights NYGB's role in market transformation thus far and its approach to the next frontiers where catalytic capital is needed.

NYGB launched its latest investment solicitation this spring. RFP 18: Financing Arrangements for High-Performance Affordable Housing invites property owners and developers, energy service companies and equipment manufacturers, capital providers, and other market participants to submit proposals for NYGB investment in multifamily affordable housing electrification and electrification-readiness projects in New York State. This new financing pathway is part of an expanded approach to the sector that includes:

- Products, terms, and rates that are calibrated to the needs of the affordable housing market and based on comparable affordable housing transactions;
- Selected indicative terms made publicly available, consistent with industry practice;
- Beneficial impact to residents weighed as a key investment goal; and
- A dedicated senior team with extensive affordable housing investment expertise.

In-depth case studies of NYGB's most exciting transactions from the year can be found in the 2020-21 Impact Report. Some examples include:

In March 2021, NYGB provided a $500,000 subordinated, multi-draw construction-to-term facility to WFHA which is managed by J Cubed Residential LLC C/O Workforce Housing Group. WFHA will construct solar installations on 18 affordable housing buildings in Brooklyn, NY that will benefit low- and moderate-income New Yorkers and their communities. This transaction is expected to demonstrate a viable model for financing renewable energy installations at affordable housing buildings in New York State.

In March 2021, NYGB provided an 18-month senior secured $10 million bridge loan facility to Amp Solar Group Inc. Bridge Loan proceeds will finance project interconnection advance payments to National Grid and Rochester Gas and
with a greater variety of energy choices and, ultimately, lower-cost clean energy opportunities.

In March NYGB increased its previous commitment to True Green Capital Management up to $28.6 million to finance additional community distributed generation solar projects. The financing was led by CIT Bank, N.A. Term Loan proceeds are anticipated to support the development of 16 community solar projects in New York State.

In February 2021, NYGB provided $25 million to participate in a syndicated term loan facility to a portfolio of distributed solar projects primarily developed by Nexamp, Inc. The financing was led by MUFG Bank, LTD. The Term Loan proceeds are anticipated to finance 95 distributed generation solar projects in NY, MA, IL, MD and GA. Of those projects, 30 will be in New York State including community distributed generation and PPA projects.

In January 2021, NYGB provided an up to $17.4 million construction-to-term loan and $1 million letter of credit to Chautauqua Green Energy, LLC. Loan proceeds will be used to secure long-term rights to landfill gas at the Chautauqua Landfill in Jamestown, NY and construct improvements at the Landfill that will upgrade the gas for transportation and sale as renewable natural gas.

See all of NYGB’s latest transactions and announcements on the NYGB website.

New Zealand Green Investment Finance

New Zealand Green Investment Finance (NZGIF) was established by the New Zealand government to accelerate and facilitate investment that reduces carbon emissions, and is the country’s first dedicated green investment bank*. 2020 was its first year of operations and NZGIF has been active financing projects in New Zealand to enable the country’s low carbon future. By investing its capital on a commercial basis, NZGIF demonstrates and promotes the benefits of green investment to the private sector, with a view to attracting private capital to low
The challenge of attracting capital to low carbon solutions in line with New Zealand’s net-zero 2050 goals. To date, its investments have supported more solar systems on roofs, more electric vehicles on the roads and more clean technology in businesses.

Some recent activities at NZGIF include:

In May 2021, New Zealand Green Investment Finance received an additional $300 million in investment capital, increasing its total pool of investment capital to $400 million.

NZGIF has also announced the expansion of its current sector focus to include waste and plastics. NZGIF’s other target sectors, which reflect New Zealand’s unique emissions profile, continue to be transport, process heat, distributed energy resources, the built environment and agriculture.

In April 2021, it was announced that NZGIF has invested $10 million in solar energy services company solarZero, to support the growth of the company. NZGIF’s innovative mezzanine debt facility complements an existing financing facility from Westpac NZ. It is designed to accelerate the uptake and deployment of solarZero’s innovative ‘solar as a service’ model that gives customers access to solar energy without the upfront costs. The solarZero smart solar energy service provides households with more than solar panels. Its systems include solar PV and battery hardware, smart management systems, as well as real-time monitoring to help improve energy efficiency within the home. solarZero’s smart technology enables individual solar PV and battery systems to be linked to a ‘virtual power plant’ that supports the resilience of the electricity grid and local lines systems, especially at times of peak power demand.

See all of NZGIF’s latest transactions and announcements on the NZGIF website.

*NZGIF is not a registered bank.

Rhode Island Infrastructure Bank

Rhode Island Infrastructure Bank (RIIB) continues to support projects across the state including infrastructure projects, green energy and water projects that support local communities. Over the previous fiscal year, RIIB has supported
that time RIIB provided approximately $105 million in loans to infrastructure projects that have supported 1,700 jobs. 25% of the volume was with new customers and 34% was financed with private sector capital. Some example projects include:

RIIB provided five Commercial Property Assessed Clean Energy (C-PACE) loans for a total of $20 million. This funding supported the implementation of energy efficiency and solar projects in commercial properties that will reduce carbon emissions by over 14,000 metric tons. Projects included almost $500,000 in C-PACE financing to enable McQuade’s ACE Hardware in Westerly to install 200.2 kW of roof-mounted solar panels that will reduce 2,683 tons of CO2 emissions and save over $1 million in electricity costs over the expected 20-year life of the project.

RIIB financed $24 million in clean-energy components for the new East Providence High School, the largest Efficient Buildings Fund loan to date, which saved the city nearly $1 million in debt service costs. The energy efficient components of the school will provide a healthy, comfortable learning and working environment for students, teachers and staff while reducing operating costs by over $3 million.

Under the Municipal Resilience Program (MRP) six new cities and towns are participating in the 2021 round to identify top hazards and infrastructure projects to best prepare for the effects of climate change. The MRP also awarded $1.5 million in “Action Grants” to complete 12 previously identified municipal resilience projects including green stormwater management around the new Pawtucket-Central Falls transit-oriented development district, a bioretention system and coastal embankment for stormwater management, water quality improvement, and erosion control at Oakland Beach in Warwick, and green infrastructure projects for stormwater management and coastal erosion control in Little Compton.

See all of the RIIB’s latest transactions and announcements on the Rhode Island Infrastructure Bank website.
TCCL has announced new transactions, continuing its leadership in clean energy funding in India. A snapshot of the funding commitment towards projects by TCCL for the 6 months ended June 2021 are given below:

The funding is towards large-scale wind energy and solar ground mounted projects, which are either under development or commissioned across various states in India. The TCCL commitment is in the form of either long tenor project loans or non-convertible debentures.

In March 2021, TCCL received $100 million from Japan International Cooperation Agency (JICA), through a green lending facility. Through JICA’s loan TCCL would be able to mitigate the impact of climate change by offering green finance, which will contribute to decrease GHG emissions in India.

Manish Chourasia, Managing Director, Tata Cleantech Capital Limited, said: “The partnership with JICA is a significant milestone for TCCL that will enable us to accelerate the pace of transition to clean energy in India. Our focus will continue to be to fund & support projects across Renewable Energy, E-mobility & Energy Efficiency sectors. Our aim is to channelize and mainstream Climate finance in India to help mitigate the impact of climate change.”

In June 2021, TCCL published the report “Indian Renewable Open Access Landscape.” The report outlines the key states in India, which are estimated to lead the growth in the Indian Renewable Open Access space over the next 1-2 years and provides a landscape of the developers and debt financing ecosystem.

In Dec 2020, Federation of India Chambers of Commerce & Industry (FICCI) released “The India Roadmap on Low Carbon and Sustainable Mobility” for Decarbonization of Indian Transport sector. The Roadmap is a bottom-up stakeholder driven actionable vision with an operational focus for the Transport sector in the context of Sustainable Development Goals (SDGs) as well as the objectives of India’s Nationally Determined Contributions (NDCs) under the Paris Agreement.

Manish Chourasia, Managing Director, TCCL and Mudit Jain, Head – Research at TCCL, formed part of the working groups and have contributed their insights, inputs and recommendations on the Roadmap.
Green Bank Growth

The following selection of recent activities around the globe highlight efforts to develop and launch green banks and catalytic green finance institutions.

United States: Last week, Senate Democrats included the Clean Energy Accelerator in a budget resolution released covering details of upcoming infrastructure package. Earlier in July, the U.S. House of Representatives passed legislation to create the Clean Energy and Sustainability Accelerator for the third time. This push in Congress builds on support from the White House: President Biden’s American Job’s Plan, released in March, specifically named Clean Energy and Sustainability Accelerator as a key part of the administration’s plan to tackle climate change while driving investment distributed energy, residential, commercial and municipal buildings, and clean transportation, with a particular focus on investment in disadvantaged communities. Nearly 250 organizations, trade groups, capital providers and utilities have urged the Administration to make the Accelerator a key part of the ultimate infrastructure package that is passed by Congress this year.

United Kingdom: On June 17th, the UK government launched its new UK Infrastructure Bank. The new institution is tasked with accelerating investment, cutting emissions and driving investment in rural communities. Rishi Sunak, the UK Finance Minister, announced that “the UK Infrastructure Bank will accelerate our ambitions for tackling climate change and levelling up, while creating new opportunities across the UK as part of our Plan for Jobs.” Details on the UK Infrastructure Bank were released in a policy document earlier this year, which made clear the institution’s mandate of crowding-in private capital with a range of financial tools, and its core objective to help the country meet its net-zero targets while supporting regional growth.

International: On June 21, the Green Bank Design Summit kicked off a week of virtual events and workshops on the topic of green banks. Over 300 participants from 54 countries participated in the Summit, which was organized by GFI, RMI, and NRDC. Nigel Topping, the UN High Level Climate Action Champion for COP26, said at the Green Bank Summit: “I think that the case for locally driven green investment banks, helping to quickly and efficiently channel international climate funds and mobilize private capital into local solutions that strengthen vulnerable communities and help reduce inequalities has been well
can create jobs for younger generations. By fostering the financial innovation that will help accelerate the maturity of local green markets, green banks can support green recoveries that are aligned with the Paris Agreement and can even help raise further climate ambition."

Reports and Whitepapers

2021 U.S. Green Bank Annual Industry Report

In May, the American Green Bank Consortium released its 2021 Annual Industry Report, covering the activities of state-level green banks around the United States. In total, the report finds that American Green Banks have caused $7.0 billion in clean energy investment since 2011, with $1.69 billion of this investment taking place in calendar year 2020. The green bank concept was first proposed in 2009, and there are now 21 green banks in the U.S. with more in development. The mobilization ratio (overall investment/green bank investment) of American green banks was 3.7 to 1 as of the end of calendar year 2020, meaning that every green bank dollar invested resulted in $3.70 of overall investment in the American clean energy economy.

Cost competitiveness of green hydrogen on the horizon: CEFC market study

The CEFC Australia commissioned a new market study on Green Hydrogen. The study into the competitiveness of green hydrogen across 25 Australian industry sectors found that green hydrogen is already approaching cost competitiveness for heavy trucking, buses and remote power, with the potential to become commercially viable across further sectors of transportation as early as 2030. The analysis shows how parallel advances in production and distribution costs, as well as ongoing technology
driving down installation and commissioning costs, similar to the accelerated development experienced by Australia’s large scale renewable energy sector.

CEFC has also issued a new report Energising resource recovery: the Australian opportunity. Together with the Australian Renewable Energy Agency, the CEFC also released a report on Large-scale solar operations.

NY Green Bank Impact Report

In June, NY Green Bank released its inaugural Impact Report, highlighting accomplishments over the past year and previewing its strategic direction moving forward. The report summarizes the overall impact of NY Green Bank Portfolio from its inception through March 31, 2021. Over that time, NY Green Bank has committed 1.3 billion in funding via 88 transactions across 8 technology segments. These transactions have resulted in up to $3.6 billion in total capital mobilized and up to 29.3 million metric tons of CO2e avoided.

CT Green Bank 2021 Webinar Series

Connecticut Green Bank continues its 2021 webinar series, Promoting the Renewable Energy of Community. Recordings of recent webinars can be found on the 2021 Webinar series webpage. Recent webinar topics include Energy Trends and Transformations; Environmental Finance (featuring guest speaker Jeffrey R. Diehl, CEO of Rhode Island Infrastructure Bank); Financial Innovation and Energy Affordability. Upcoming webinars include a special session on the History of Environmental Justice in America and the Frontlines of Climate Justice Today in Connecticut.

De-risking Institutional Investment in Green Infrastructure

The OECD has released a new policy paper cataloguing tools and techniques used by public actors such as national development banks and green
The paper updates the dataset underlying the 2018 "Progress Update on Approaches to Mobilising Institutional Investment for Sustainable Infrastructure", to provide an expanded typology of de-risking instruments and highlight several novel approaches for mobilising institutional investment. The analysis provides development banks and other public financial institutions a nuanced view of options for targeted mobilisation efforts. The report features in particular the work of green banks including CEFC Australia and the NY Green Bank.

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