

Climate Bonds Standard & Certification Newsletter

Q3 2017 ISSUE 5

Giant Chinese & Indian organisations take Certification path

ICBC: Climate Bond Certification for world's largest bank!



中国工商银行

INDUSTRIAL AND COMMERCIAL BANK OF CHINA

You don't get any bigger than state owned [Industrial and Commercial Bank of China](#) (ICBC) - it is the largest publicly listed company. So, we're very excited that its inaugural USD2.15bn One Belt One Road (OBOR) green bond is [Climate Bonds Certified](#).

Use of proceeds are [renewable energy, clean transport, energy efficiency & sustainable water management](#).

The bond was listed on the Luxembourg Green Exchange and European investors took over 70%, issued in three tranches of EUR 1.1bn, USD450m and USD400m.

ICBC sets the best practice bar

ICBC received Climate Bonds Certification, with [Zhongcai Green Finance](#) carrying out the verification. Zhongcai also provided assurance against Chinese standards, and Cicero provided a [second opinion](#).

ICBC has set the bar high in adopting international best practice for this bond and we expect other Chinese issuers including banks will follow their positive example.

Greening the One Belt One Road

OBOR is a development campaign for China to boost trade and stimulate economic growth, across and beyond Asia.

It is providing huge investment opportunities for [green infrastructure projects](#) and President Xi has stressed OBOR needs to be green. This [Certified issuance from ICBC](#) brings President Xi's promise of making OBOR green into action.

Masala is back & IREDA goes 1st with a Certified Climate Bond



The [Indian Renewable Energy Agency \(IREDA\)](#) has issued a [Climate Bonds Certified](#) Masala Green Bond worth USD300m. This is the first green masala bond by a financial institution.

By obtaining Climate Bonds Certification, IREDA has set a positive precedence for subsequent Indian issuers.

Proceeds are for [renewable energy projects across India](#) that will help the Indian Government achieve its vision of 175GW renewable energy capacity by 2022.

The [deal achieved the tightest ever yield](#) in a public masala issuance.

East Coast-West Coast lead on US green muni issuance

Latest figures show East Coast-West Coast leading the US muni green bond market. New York is in front with USD4.5bn, California just behind on USD4.3bn. Adding Massachusetts, Washington State and Connecticut reinforces the coastal profile.

All five states are members of the Climate

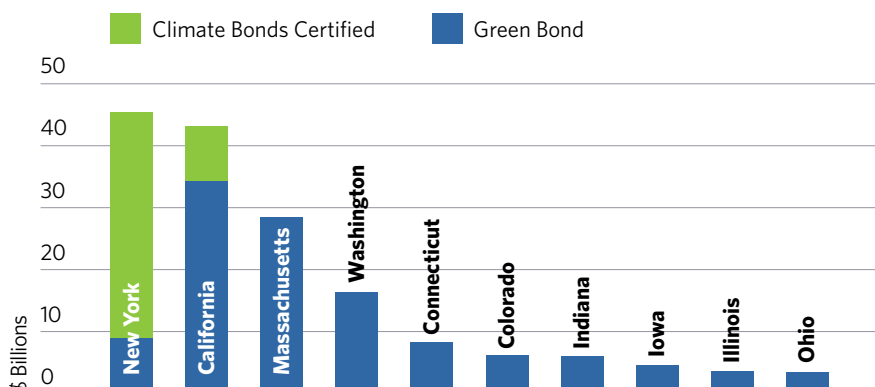
Alliance, pledging to continue to work towards meeting US emissions reduction targets. And they're increasingly using Certification for their green issuances.

Issuers in California and New York have been early adopters of Climate Bonds Certification with [New York State HFA](#) and [MTA](#) on the list

of Programmatic Certifiers (see pg.2). On the West Coast, Certifications from [SFPUC](#) and [BART](#) are soon to be joined by another large transport authority.

We expect to see other green bond issuing states follow this best practice example and begin using [Climate Bonds Certification](#) soon.

Top 10 US State green bond muni issuers 2013-Q3 2017



Read on for:

Pg. 2 - Launch of the Marine Renewable Energy Criteria

Pg. 2 - Programmatic Certified Climate Bond Issuers: Who? What? Why?

Pg. 3 - Facts and figures from Q3

Pg. 5 - Harmonisation of the green bond market

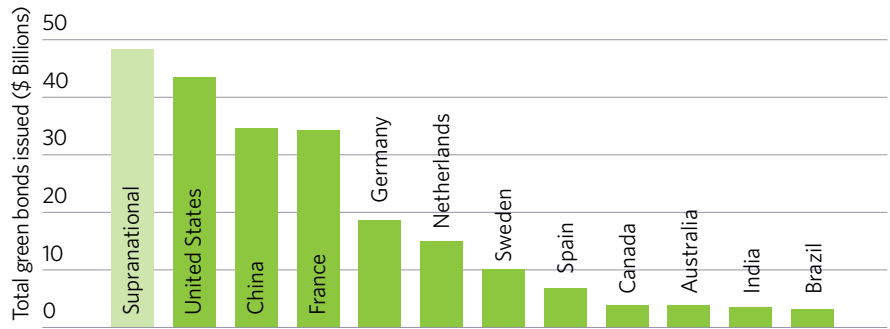


US green finance action in 2018

The California Treasurer, with the Milken Institute and Environmental Finance, will be hosting a [Green Bond Symposium](#) in February 2018. Governor Brown is also holding a [Global Climate Action Summit](#) in San Francisco in September 2018 to coincide with [PRI's annual conference](#).

To date the US remains the single largest national issuer. However, China, France and Germany are not far behind. We expect China to continue its expansion (ICBC's Certified bond (pg.1) is a clear indication they intend to), India will move up the ranks and green flows from European nations should grow as the [EU HLEG](#) process shifts to implementation.

US leads on green bond issuance, but other nations are not far behind



Speaking at Climate Week, New York City, Sean Kidney encapsulated the challenge in these terms: "Capital flows must shift: More

vanilla bonds must become climate-aligned. More climate-aligned bonds must become green bonds."

Standard matures & expands as it gathers momentum

New Sector Criteria for Marine Renewable Energy just released



In early October, we were excited to announce the release of our latest set of Sector Criteria: the [Marine Renewable Energy Criteria](#). These Criteria lay out disclosure, GHG emission mitigation and climate adaptation and resilience requirements that marine renewable energy investments must meet to be eligible for Climate Bonds Certification.

Marine Renewable Criteria cover ALL offshore renewable energy

A diverse array of technologies are being developed and deployed to harness clean power from tides, waves, ocean currents, offshore wind, offshore solar and salinity and temperature gradients. Technology convergence has not yet occurred. These Criteria can be applied to all these technologies, both established and emerging.

Increased renewable energy generation capacity and associated climate resilient infrastructure is essential to move to a low-carbon economy and is definitely in line with limiting warming to 2°C - the key principle we guide our Criteria by.

Despite the inherent climate compatibility of all renewable energy, distinct Criteria for marine investments are necessary:

1. To ensure sufficient transparency and disclosure
2. To confirm the facilities do not rely on substantial fossil fuel back-up
3. To confirm the resilience of the assets funded

Developed by our Technical & Industry Working Groups

A big thank you goes out to our dedicated [Technical and Industry Working Groups](#) for their instrumental role in developing these Criteria.

The race is now on to become the first issuer of a Certified Climate Bond for Marine Renewable Energy!

[Download the NEW Criteria](#)

Programmatic Climate Bonds Certification taking-off

Programmatic Certification makes the certification process more cost effective for issuers that intend to issue multiple Certified Climate Bonds in one year.

It is a streamlined process to Climate Bond Certification that was introduced in the latest version of the Climate Bonds Standard (Version 2.1) in early 2017. It allows an issuer to verify that a large pool of assets are compatible with the Climate Bonds Standard and then issue Certified Climate Bonds from that pool as and when they want to.

Programmatic Certification is quicker for issuers coming to market multiple times

During the typical verification process,

issuers must engage with a verifier for pre- and post-issuance Certification.

With Programmatic Certification, whilst issuers must still complete pre- and post-issuance Certification for their first bond, they then only need to engage a verifier on a yearly basis, thereby significantly reducing the verification load.

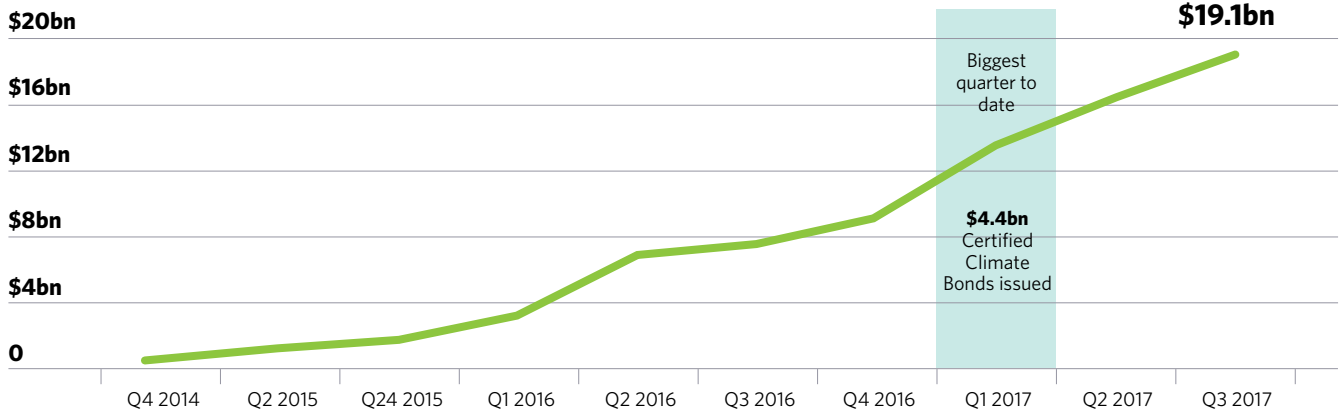
This option has been very popular.

First 10 issuers of Programmatic Certified Climate Bonds:

- 1 **New York MTA** - USA
- 2 **New York State Housing Finance Agency (NYSHFA)** - USA
- 3 **San Francisco Public Utility Corporation** - USA
- 4 **SNCF Réseau** - France
- 5 **Indian Renewable Energy Development Agency (IREDA)** - USA
- 6 **San Francisco Bay Area Rapid Transit (BART)** - USA
- 7 **The Rural Corporation Electrification Limited** - India
- 8 **The City of Cape Town** - South Africa
- 9 **Azure Power Ltd.** - India
- 10 **Contact Energy** - New Zealand

Summary of Certified Climate Bonds

Certified Climate Bond Issuance



2017 Certified issuance has already overtaken last year's Certified issuance

At the close of Q3, [Certified Climate Bond issuance](#) for 2017 totaled USD9.8bn - over USD2bn more than the total for last year (USD7.5bn). The same is also true for [total green bond issuance](#). At the end of Q3, total green bond issuance stood at USD83bn compared to USD82bn for the whole of 2016.

We're looking forward to reporting the final figures for 2017 in next quarter's issue. Will we get to the USD12bn of Certified Climate Bond issuance we anticipated at the beginning of this year?

South Africa and New Zealand enter world of Certified Climate Bonds for the first time

This quarter, the geographical diversity of Certified Climate Bonds has continued to

expand with Certifications from South Africa and New Zealand for the first time.

Now, the beady eyed among you will notice that New Zealand does not feature in the bottom right pie chart.

New Zealand's Certification is from [Contact Energy](#), the the country's second largest electricity generator, and it is a Certified debt programme, covering committed bank facilities, commercial paper, retail and wholesale bonds and US private placement facilities.

Contact Energy have had a NZD1.8bn programme Certified. Proceeds are for renewable energy, mainly geothermal power.

So, while this is absolutely a green issuance, it doesn't appear in the pie chart because of the variety of debt instruments. Climate Bonds Certification is available for a [range of](#)

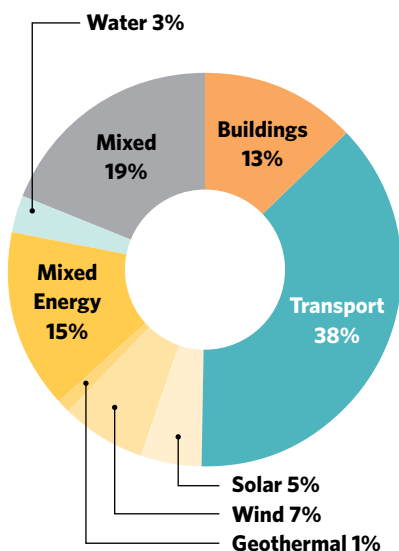
[debt instruments](#) other than bonds.

Review & revisions of Climate Bonds Standard for version 3.0

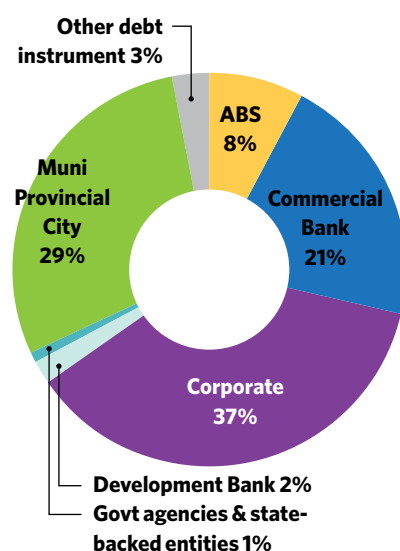
As part of our review, revise and update routine, we will release a new version of the [Climate Bonds Standard](#), Version 3.0, in 2018. The new Version seeks to better align the Climate Bonds Standard with the pillars of the Green Bond Principles to create a more consistent approach to Certification.

Version 3.0 will be released for public consultations in late 2017. We'll announce the start [on our blog](#). Once in public consultation we welcome any input or feedback from all interested parties such as verifiers, issuers, regulators and policy makers. After public consultations, we expect to release Version 3.0 in early 2018.

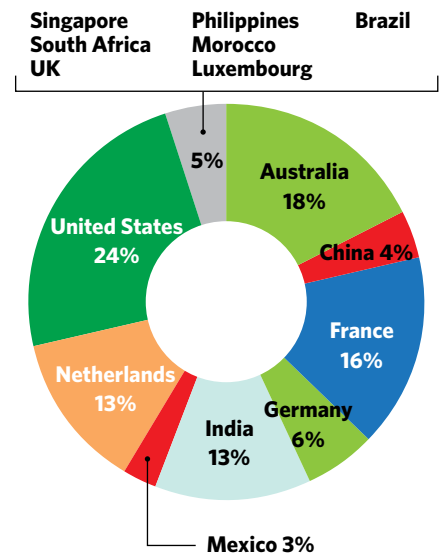
Transport continues to dominate Certified Climate Bond issuance



More Certified issuance, Corporates take the lions share



US, Australia, France & Netherlands lead Certifications



What's happening with our TWGs?

Water



Phase I Status:
Criteria published

**Phase II Status: IN
PUBLIC CONSULTATION NOW**

Phase II of the Water Criteria, covering nature-based and hybrid infrastructure for water capture, storage, treatment, flood/drought defence, storm-water management, and ecological restoration is now open for public consultation.

[Read the criteria document and sign up for one of our explanatory webinars!](#)

Public consultation was announced with the Consortium; Ceres, WRI, CDP, AGWA and SIWI. We're keen to hear all your feedback. Please send comments to [Lily Dai](#).

Marine



Status (Renewables):
Criteria published

**Status (Fisheries,
Aquaculture & Coastal Infrastructure):**
TWG developing Criteria

This month, the [Marine Renewable Energy Criteria](#) were released and can now be used for Certification (see pg.2).

Development in other Marine areas continues, currently focusing on Criteria for Fisheries. Recently, we have been grappling with GHG thresholds for Fisheries. The data is available; the challenge is working out how to use it.

We hope to get the Fisheries Criteria out for public consultation before the end of the year.

Land Use



Status (Forestry):
TWG developing
Criteria

As signalled in the last newsletter, we have now began taking an activity based approach to the [Land Use Criteria](#). First up is the Forestry Criteria.

Development has started and we've begun by identifying activities over a range of forestry assets, from timber production, plantation forestry and natural forests to supply chain assets.

The final Criteria will be a list of activities, assets and projects that are eligible for Climate Bonds Certification. There will also be a climate adaptation and resilience checklist that projects will need to comply with.

Waste Management



**Status: TWG
developing Criteria**

The [Waste Management Criteria](#), covering major infrastructure assets for managing post-consumer materials including recyclables, organics, and non-recyclables is progressing quickly.

The TWG members are currently discussing methods and metrics

that can be leveraged to determine climate compatibility using a range of tools, most notably a robust life cycle assessment of each asset category and waste type. Criteria development currently focuses largely on mitigation, but resilience will be addressed too.

Bioenergy



**Status: public
consultation imminent**

The TWG discussion on [Bioenergy Criteria](#) is nearing completion. The Criteria covers bioenergy for electricity, heating and transport, and has three components: disclosure, mitigation, and adaptation & resilience.

The disclosure component aims to increase transparency. The mitigation component is a GHG threshold for the bioenergy produced that is aligned with 2°C warming target. The adaptation & resilience component checks issuers have identified and addressed climate risks. Issues such as food security and indirect land use impact are also covered.

The IWG, made up of industry experts from about 20 organisations, was convened in early October. It has discussed the practicality of the Criteria.

Hydropower



**Status: TWG
developing Criteria**

During Q3, the TWG has been finalising the mitigation component. The IWG had two meetings to discuss the structure of the [Hydro Criteria](#) and the mitigation component.

Discussion focussed on the GHG threshold for emissions, scope and boundary of emissions assessment, emissions allocation methodology and threshold for predictive screen (if an issuer passes a predictive screen test, it demonstrates that they would pass the GHG threshold so they don't need to conduct a GHG emission assessment).

Next, the TWG will focus on developing adaptation and resilience requirements leveraging existing tools, such as IHA's Hydropower Sustainability Assessment Protocol (HSAP).

Buildings



**Status: Criteria
published, now
being expanded**

Work continues on the [Buildings Criteria](#), which currently covers both residential and non-residential, including commercial buildings. Zero-carbon emissions trajectories for commercial assets in several major French cities are currently undergoing review by the TWG and will be available for Certification use shortly. These cities include, Bordeaux, Lille, Lyon, Marseille, Nantes, and Paris.

Progress has also been made in several other regions. Residential proxies have been developed for Australia as well as England & Wales. Commercial baselines for New Zealand, including Auckland and Wellington, have been derived and will be available for use soon. The TWG continues to look for building performance data to expand the list of certifiable cities.

In other news...

Harmonisation in the market

EU HLEG Report draws closer

Submissions to the EU [High Level Expert Group](#) (HLEG) on Sustainable Finance have now closed and the final report and associated recommendations are being considered for release at the end of 2017. In July, HLEG delivered an [Interim Report](#) outlining eight areas for change. However, in recent comments the Chair, Christian Thimann, has indicated this is being honed down to five.

They include taxonomy, green bond standards and labels, fiduciary and investor duty, infrastructure coordination and a stronger engagement by supervisory bodies around sustainability and risk. We're represented on the HLEG and will keep you updated as further details come to light.

International Standards Organisation

The [International Standards Organisation](#) (ISO), best known for its technical standards that support global trade and standardisation, has recently started working on how climate friendly technologies and the finance community interact. Importantly, these ISO products are fed into the national standards bodies of most countries through existing agreements and infrastructure.

There are two (and perhaps three) ISO working groups getting underway on green investment topics. We are deeply involved in these efforts and we're optimistic that the timeline for standards development under the ISO process will align nicely with the other current global efforts. Please [get in touch](#) if you would like to be involved in these ISO standard setting processes.

Bringing adaptation & resilience considerations into the Criteria

In 2016, global average temperatures were 0.99°C warmer than the mid-20th century mean, making 2016 the third year in a row to set a record for global average surface temperatures. The planet's average temperature has risen about 1.1°C since

the late 19th century and we know that even if we freeze levels of atmospheric CO₂ right now, there would be further warming because of the time lag between peak CO₂ emissions and peak temperature rise.

Infrastructure must be climate resilient

With this locked in warming comes increased heatwaves, reduced availability of freshwater and increased extreme rainfall events, to name just a few of the impacts. Of course, these are globally generalised changes and what is likely to happen in specific locations will vary. Current and future infrastructure in the pipeline needs to consider the likely local changes if it is to remain viable.

For example, in the water sector, climate change is already presenting challenges. Changing hydrological conditions mean that water quality, quantity, and the timing of availability are evolving and will continue to do so. This is evident in the everyday but also, recently, with extreme events such as Hurricane Harvey, Irma, Maria, Jose and Lee.

Adding resilience requirements into the Climate Bonds Standard

Through the [Climate Bonds Standard](#), we recognise that transitioning the economy to be aligned with no more than 1.5°C warming is going to take emission mitigation and climate adaptation and resilience. The Sector Criteria currently in development aim to incorporate requirements for mitigation component and adaptation & resilience.

For example, to comply with our Water Criteria, issuers must assess the likely risks their assets will face and that the surrounding system will be exposed to, through a Vulnerability Assessment, and where needed, an established Adaptation Plan. The efficacy and thoroughness of both are evaluated.

The Climate Bonds Standard aims to identify assets and projects that are truly climate compatible. To do so, there must be requirements based on both emissions profile and climate adaptation and resilience capacity.

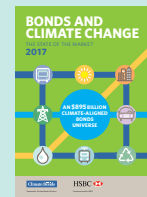
Upcoming events



Water public consultation webinars

Phase 2 of the Water Criteria has just been released for public consultation and we're running an explanatory webinar on 20th November. Sign up [here](#).

Recent publications



Bonds & Climate Change: State of the Market 2017 report launched

Our flagship annual report was very recently released at New York Climate Week. You can [download it on our website](#). So far the [Global](#) and [Brazilian](#) editions are available, with Canada, South Korea and Australia editions to follow soon.



Green bond pricing in the primary market

This report, released in August, investigates if green bonds price tighter than expected. [Download a copy here](#).

Coming soon...



Bioenergy public consultation

Bioenergy Criteria will be released for public consultation soon. Release will be announced on [our blog](#).



Buildings Criteria: zero carbon trajectories for 4 new countries

We will shortly be releasing zero carbon trajectories for France, England, Wales and New Zealand. Release will be announced on [the blog](#).

Stay tuned

Follow Climate Bonds!

Other upcoming events and the latest news are announced via the [Climate Bonds Blog](#), [subscribe here](#) and follow us:



www.climatebonds.net

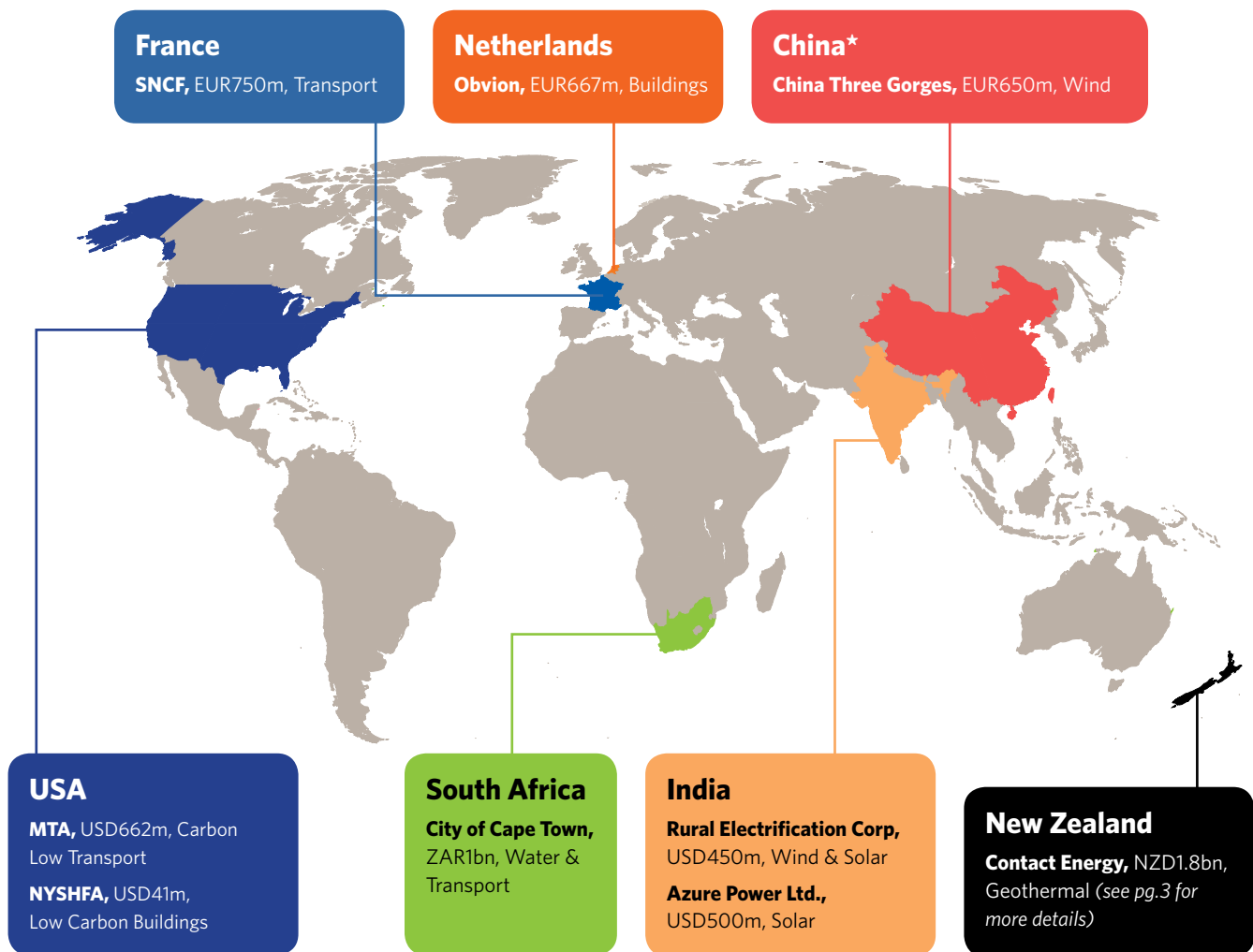
New Approved Verifiers:

Kestrel Consulting Inc, Deloitte Spain, and Carbon Care Asia join the list of [Approved Verifiers](#). Approved Verifiers check compliance with the Climate Bonds Standard.



Snapshot of Certified Climate Bonds

Q3: July - October 2017



*Bond was Certified post-issuance

Gaining certification post-issuance is available for any already issued bond provided that its nominated assets comply with the [Climate Bonds Standard](#). Issuers are doing this to access the reputational benefits that Climate Bonds Certification brings.

Certified in Q3, but not issued in Q3

We've actually Certified a lot more bonds this quarter than shown above. However, issuers will often hold from issuing until market conditions are just right. We can only disclose above the bonds that are Climate Bonds Certified and issued.

Meet the Climate Bonds Standard & Certification team



Anna Creed
Head of Standards



Lily Dai
Research Analyst Bioenergy, Water & Hydropower



Cory Nestor
Research Analyst Buildings & Waste



Katie House
Research Analyst Marine & Land Use



Rob Fowler
Head of Certification



Matteo Bigoni
Certification Manager

Disclaimer: The information contained in this communication does not constitute investment advice in any form and the Climate Bonds Initiative is not an investment adviser. Any reference to a financial organisation or debt instrument or investment product is for information purposes only. Links to external websites are for information purposes only. The Climate Bonds Initiative accepts no responsibility for content on external websites. The Climate Bonds Initiative is not endorsing, recommending or advising on the financial merits or otherwise of any debt instrument or investment product and no information within this communication should be taken as such, nor should any information in this communication be relied upon in making any investment decision. Certification under the Climate Bond Standard only reflects the climate attributes of the use of proceeds of a designated debt instrument. It does not reflect the credit worthiness of the designated debt instrument, nor its compliance with national or international laws. A decision to invest in anything is solely yours. The Climate Bonds Initiative accepts no liability of any kind, for any investment an individual or organisation makes, nor for any investment made by third parties on behalf of an individual or organisation, based in whole or in part on any information contained within this, or any other Climate Bonds Initiative public communication. © Climate Bonds Initiative. Published on November 2017. Designed by Godfrey Design.

Subscribe - Sign up [here](#) to our blog and receive our newsletters in your inbox.



www.climatebonds.net