

CHP-Funder Newsletter Fall 2017

Green Bonds surpass \$100 Billion in 2017

Green bond issuance in 2017 has surpassed the US\$100 billion milestone, marking a new record, according to Climate Bonds Initiative (CBI) data.

<https://www.pv-tech.org/news/green-bond-issuance-surpasses-us100-billion-in-2017>

Military microgrid spending could top \$1B annually by 2026, Navigant finds

According to the report, annual microgrid implementation spending is expected to reach \$453 million this year, increasing to \$1.4 billion in 2026.

<https://www.utilitydive.com/news/military-microgrid-spending-could-top-1b-annually-by-2026-navigant-finds/509877/>

Microgrids Gaining Macro Attention

Microgrids can support both net-zero and resiliency goals by pairing renewables with additional less-intermittent resources, like CHP, to enable full off-grid operation. Two projects illustrate the range of possibilities – both behind the meter and at utility scale – for supporting a greener and stronger distributed grid.

https://issuu.com/constructionbusinessmedia/docs/1711_nzb/42

Sustainable Finance Monthly Seminar: Hannon Armstrong

Hannon Armstrong (NYSE: HASI) is a leading investor in sustainable infrastructure, including energy efficiency and renewable energy, providing capital to established sponsors and high credit quality obligors for assets that generate long-term, recurring cash flows. An annual Sustainability Report Card is published as part of its Annual Report to shareholders, detailing the environmental impact of its individual investments made each year, namely metric tons of CO2 reduced per \$1,000 of investment. Trademarked as **CarbonCount®**, Hannon Armstrong applies the same impact reporting methodology to its green bond issuances. In this seminar, [Guy Van Syckle](#) and [Amanda Cimaglia](#) will touch upon the development of CarbonCount, its methodology, its implementation.

<https://cbey.yale.edu/events/sustainable-finance-monthly-seminar-hannon-armstrong#>

Cogeneration Day 11/2/17

The premiere yearly event, dedicated to a technology with the potential to significantly impact the future of the energy in America. A one-day symposium designed to educate America's energy consumers on the merits, logistics and potential cost savings of Combined Heat and Power (CHP), a method of electricity generation that produces useful heat from otherwise wasted thermal energy. Held at the Hyatt Regency New Brunswick, New Jersey.

<https://www.cogenerationdayusa.com/>

Banking and Clean Energy: A Blossoming Friendship

At the end of July, JPMorgan Chase revealed its plans to facilitate \$200 billion in clean-energy financing through 2025. This new pledge—which is the largest commitment by a financial institution worldwide—raises that figure to approximately \$22 billion per year.

<https://internationalbanker.com/banking/banking-clean-energy-blossoming-friendship/>

Making large-scale energy efficiency easier (and more affordable)

Between 2006 and 2014, investments in commercial building energy efficiency more than doubled from seven billion to 16 billion. Incentive programs and innovative technology are constantly changing. Energy Efficiency and renewable energy financing have come a long way in recent years. Operating leases and capital leases, combined with incentives, offer new options to choose. Yet even with the availability of these options, there are challenges. Building owners and operators often struggle to understand the nuances of the financing options available. This can make it difficult to overcome decision fatigue and select the best-suited choice for their needs. Vetting and selecting a financing option—each with its own set of associated pros and cons—carries very real transaction costs, which is why it's important to make the right choice.

<http://business.edf.org/blog/2017/10/17/making-large-scale-energy-efficiency-easier-and-more-affordable/>

Do AEC firms have the wattage to meet the demands of a charged-up data center sector?

There is no slowdown in sight for charged-up data center sector. Data centers are projected to consume 73 billion kilowatt hours of electricity by 2020. That would be 3 billion kWhs more than in 2014, according to the website [Data Center Knowledge](#). Data center providers are already scrambling to meet that anticipated demand. Through the first half of 2017 there were 506 MWs under construction, compared to the 353 MWs under construction during the same period a year earlier, according to JLL's latest report on North America's data center sector.

<https://www.bdcnetwork.com/do-aec-firms-have-wattage-meet-demands-charged-data-center-sector>

NY Green Bank seeks \$1B in private sector investment for clean energy projects

New York's Green Bank has been a success, driving almost \$1.4 billion in investment in the state. That success has attracted interest from other investors while also setting up New York to begin funding projects outside of the state. New York Gov. Andrew Cuomo (D) announced the state's Green Bank is seeking at least \$1 billion in additional private sector funding to help grow clean energy projects in the state. Green banks are gaining traction as a tool to help fund clean energy projects. Last year, NYGB announced a plan to increase its portfolio by two-thirds, mainly by investing in larger clean energy projects.

<https://www.utilitydive.com/news/ny-green-bank-seeks-1b-in-private-sector-investment-for-clean-energy-proje/508549/>

A trigeneration plant for the Science Central technology hub in Newcastle

The city of Newcastle is ready to invest in new energy efficiency projects. For years the government has supported the development of district heating grids for council housing. An innovative project on a brownfield site, Science Central is under construction, a technology hub equipped with a trigeneration plant. A great opportunity for the city of Newcastle, both from an economic and environmental point of view.

<http://www.cogenerationchannel.com/en/video/category/teleriscaldamento/490/newcastle-una-centrale-di-trigenerazione-il-polo-t/>

Microsoft looking at fuel cells

Microsoft has made a strategic decision to use fuel cells to power its server farms and make efficiency gains. Microsoft is also attracted to fuel cells because they are responsible for less greenhouse gases than traditional sources. While it will be using natural gas in its fuel cells at first, it will seek to procure a clean fuel such as hydrogen made from renewable energy in a similar fashion that it signs power purchase agreements with solar and wind developers.

<http://www.decentralized-energy.com/articles/2017/10/microsoft-opts-for-fuel-cells.html>