

THE PHFA PROJECT

A National Net-Zero-Energy Initiative



July 2016

In the Spring of 2014 a group of approximately 25 “stakeholders”, composed of affordable housing developers, representatives from the Sustainability, Housing Authority and Mayor’s offices of Philadelphia and Pittsburgh as well as Passive House architects, designers and builders gathered to meet in Harrisburg, PA to propose to PHFA, the Pennsylvania Housing Finance Agency (organization responsible for all Low Income Housing Tax Credit - LIHTC - Federal funding for affordable housing in the state) that they initiate a project which would have ALL affordable housing in Pennsylvania be designed and constructed to a Net-Zero-Energy-**Capable** standard by 2030. The “tool” proposed to achieve this was **Passive House**. PHFA was already looking to “raise the bar” with respect to energy efficiency as developers had been surpassing their standards for years. PHFA welcomed the challenge and within 4 months put the project in motion by introducing language into their 2015 Qualified Allocation Plan (QAP) which incentivizes developers interested in 9% Low Income Housing Tax Credit (LIHTC) funding to design/construct their projects to meet the rigorous Passive House Standard. To do this, they created a new category, worth 10 points, for “Passive House Certification”. The LIHTC application is a point-based system and extremely competitive. Because PHFA funds only 25% of all project applications each year (based primarily on highest point scores), the interest from developers was enormous. **85** Multi-family project applications were received in the 2015 round of funding. **32** of those projects applied as Passive House projects. The construction cost premium calculated between Passive House projects and non-Passive House projects across the State of Pennsylvania was **less than 2%**. Of the 39 projects that were awarded funding, **EIGHT** are Passive House projects. In July, 2016 PHFA released the list of 2016 LIHTC projects awarded funding. Of the 38 projects funded, **TEN** of those projects are Passive House projects (**500 units**) and the cost differential between the Passive House projects and non-Passive House projects was virtually identical to 2015. These over **900** new affordable housing units will be the largest concentration of Passive House/Net-Zero Energy-Capable dwelling units in the country. This is a momentous shift in both the awareness and adoption of high performance design and building principles within the PA development community within the **SECOND** year of this 15-year project.

Further research indicated the same inherently competitive nature of 9% LIHTC funding for affordable housing in many other State Housing Finance Agencies (HFAs). Like PHFA, other HFAs use the competitive structure of their QAPs to further agendas important to each State, energy efficiency frequently being one of those agendas. This reality, combined with the success of the first two rounds of funding for Passive House projects in Pennsylvania, has turned the PHFA Project into a national initiative. 36 other HFAs have been engaged to replicate PHFA’s Passive House strategy to get to a Net-Zero-Energy-Capable standard by 2030 and to-date **New York, New Jersey, D.C., Rhode Island, Massachusetts, Connecticut, New Hampshire, Ohio, Illinois, Idaho and South Dakota** Housing Finance Agencies have, this or last year, included Passive House in their funding structures (with Maine, Vermont, Delaware, Maryland, Kentucky, Indiana, Michigan, Missouri, Oklahoma, Wisconsin, Minnesota, Iowa, Montana, Utah, Washington, Oregon, Nevada, California and Alaska actively engaging with the initiative). The largest of these States, New York, was the first to announce this, at which point it was unexpectedly picked-up by the White House and incorporated into THEIR comprehensive plan to bring renewable energy and energy efficiency to households across the US: <http://nypassivehouse.org/white-house-announces-passive-house-initiative/>.

And while this project is intentionally targeted at the “affordable housing” sector, it is designed to train precisely the same design and building professionals responsible for the “market-rate” sector. As such the PHFA Project is really a catalyst for radical and significant market penetration of Passive House/Net-Zero-Capable housing in the United States, the impacts of which will aid in aggressively transitioning the design, development and building industry (responsible for 45% of all GHG emissions) to a Zero Carbon future by 2030.