

September 22, 2021

**Testimony of Mr. Donnel Baird to the U.S. Congressional Joint Economic Committee**

I was born right down the street, here in our nation's capital. My parents had moved to America in search of a better and a healthier life. In their home country, they lived near a group of mineral mines which had negative health consequences for my family, causing my mom to lose several pregnancies.

I grew up in a Brooklyn apartment with no heat. Like many of our neighbors, we heated our apartment with a gas oven. Every night, we would turn on the gas burner, open up the oven door. My dad was a mechanical engineer; we knew the oven produced carbon monoxide and other toxins and was not safe. So, we opened the windows to help clear the air. You do not need to be an engineer, or the CEO of a clean tech startup, to know that releasing toxic gases into homes is bad for public health, and that leaving windows open to mitigate the effects is a waste of resources.

I founded BlocPower, my climatetech startup, in part, to help address the energy issues my family struggled with growing up. Households account for 42% of US energy-related carbon emissions and BlocPower is focused on the greening of buildings, by replacing old antiquated fossil fuel energy systems with all-electric technology.

The business case for BlocPower is simple. BlocPower installs clean, zero-emission technology in older buildings that use fossil fuels around the country. BlocPower makes money because this technology saves so much in energy and other costs that with the right transaction and incentive structure, BlocPower is able to turn a profit and leave households spending less on energy than before. In the process we dramatically lower buildings' carbon emissions, make them healthier and more comfortable to live in. In essence, we create both jobs and healthier communities, while delivering value.

I will never forget one of BlocPower's first projects, when we were called in to convert an aging school building following a tragedy. This building had been burning fossil fuels in the basement to power the facility; however, the building's ventilation system was not set up correctly. As a result, air pollution from the basement was being pumped into the cafeteria, contributing to chronic asthma amongst the schoolchildren. The school nurse had to manage over 70 cases of asthma at the school. The air was so poor that one day a four-year-old student needed to be taken to the emergency room following a severe asthma attack. Tragically, this child died.

We know this is not an isolated incident. Our schools and our homes across this country need and deserve electrification. Electric buildings are better buildings.

Across the country, we are starting to see communities rethink the role buildings play in keeping people healthy. This type of shift in thinking is not new. Just as our country changed its behaviors of using lead-based paint once the severe health consequences of it were understood, we need to rethink how we power furnaces and ovens in buildings. We know that fossil fuel

powered ovens and furnaces are so unhealthy, producing so much nitrogen dioxide and carbon monoxide, and as a result causing serious health consequences.

The problems of dirty fuels in buildings are fixable.

We know this technology works. In Brooklyn, new buildings under construction often include heat pumps--the challenge is how to retrofit existing buildings to include heat pumps. We have installed efficient energy systems in schools, houses of worship, and several hundred apartment buildings in New York City. We are retrofitting an apartment building on the Lower East Side of Manhattan as we speak today. The workforce exists. In New York City right now, we are training 1,000 new workers from disadvantaged communities to install these systems.

We also have the ability to bring the same incredible technology, software and hardware, to the challenges of heating and cooling and making hot water in buildings. The tech is safe, uses modern software, and cloud computing, and is 100% all electric. It saves money, it makes these spaces more comfortable to live in, it eliminates so many cumulative health risks, like asthma, and many more acute ones, like carbon monoxide poisoning.

These are real benefits to families. Aggregated across America, these benefits to our economy are massive. Billions of dollars a year in health savings, billions more in disposable income families save on energy bills and spend in local communities, or save towards a more secure future.

The markets have spoken, and endorsed this better technology. All electric low carbon healthy buildings are being embraced by Apple, Microsoft, Google, Goldman Sachs, American Family Life insurance company, Salesforce, the NY State government. Our startup works with all of them.

The government has a key role to play to ensure that the benefits of all electric buildings are available to all Americans. Rebates can help reduce the upfront costs of American converting their homes to all electric, so that it's more affordable. Rebates can also help leverage government money with private sector capital. Today, we raise five private dollars for every government dollar in our partnership with Goldman Sachs. In addition, expanding lending through the Department of Energy's Loan Program Office could provide significant new capital to grow electrification across the U.S.

Electrification can save families money and create jobs in urban America and rural America. We can train the high skilled tech-enabled construction workers that our country needs. Not just to electrify buildings, but to build new homes and install new infrastructure across America. We can make our houses smart, and electric, and responsive to a modern smart grid, so that we can protect ourselves from climate disasters.

America should lead the world in innovation, in manufacturing and workforce to convert the world's buildings to renewable electricity. Congress can and should help ensure America is positioned to lead in that market. Thank you.