Clean Indoor Air at 50% or less energy: Next-Gen Nanotechenabled HVAC Filter

CORE LEADERSHIP



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POTENTIAL PARTNERS





GOAL

We want to provide access to healthy indoor air to everyone while reducing GHG emission from HVAC operation by 50% or more by **utilizing existing HVAC infrastructure**. We believe that access to <u>clean air is a right, not a privilege</u>.

WHY THIS IS IMPORTANT

- Existing HVAC infrastructure can't handle HVAC filter with higher MERV rating required to provide clean indoor air
- HVAC operation results in 30% of US annual emission and higher MERV rating would increase emission by ~ 18%
- Disadvantaged communities in are **<u>3 times more likely</u>** to get sick from air-borne disease • There is an urgent need for a new paradigm in air filtration: solutions that deliver cleaner air without compromising existing systems or the environment

WHAT IS OUR SECRET

WHAT ARE WE PROPOSING

- Leverage Cabomba's nanotech enabled HVAC filter that can capture all air borne contaminants while using 50% or lower energy (reduce operational carbon emission)
- Extend the lifetime of existing HVAC infrastructure to *reduce embodied carbon*
- Provide the HVAC filter to users at cost neutral price point to drive adoption
- Embed our technology in other HVAC filter manufacturers' HVAC filter to drive faster distribution ("Cabomba inside")

HOW WILL WE ACHIEVE THIS

- Scale up of nano manufacturing unit at mHUB
- Run pilots using contract manufacturing
- Work with nonprofits at Chicagoland to include community input into design and manufacturing

Our nanotech-based filter uses molecular force to capture contaminants with an open architecture

















