

# n-Breeze

Multifunctional Membrane



# Tuberculosis ; TB



Do you know cough and sneeze can transmit many germs a huge distance—up to **4 metres** and stay in airborne **45 mins**?





**Infection Risk in  
Confined Space**

Thailand

is one of the 14 countries  
with the highest TB burden

→ **END  
TB**

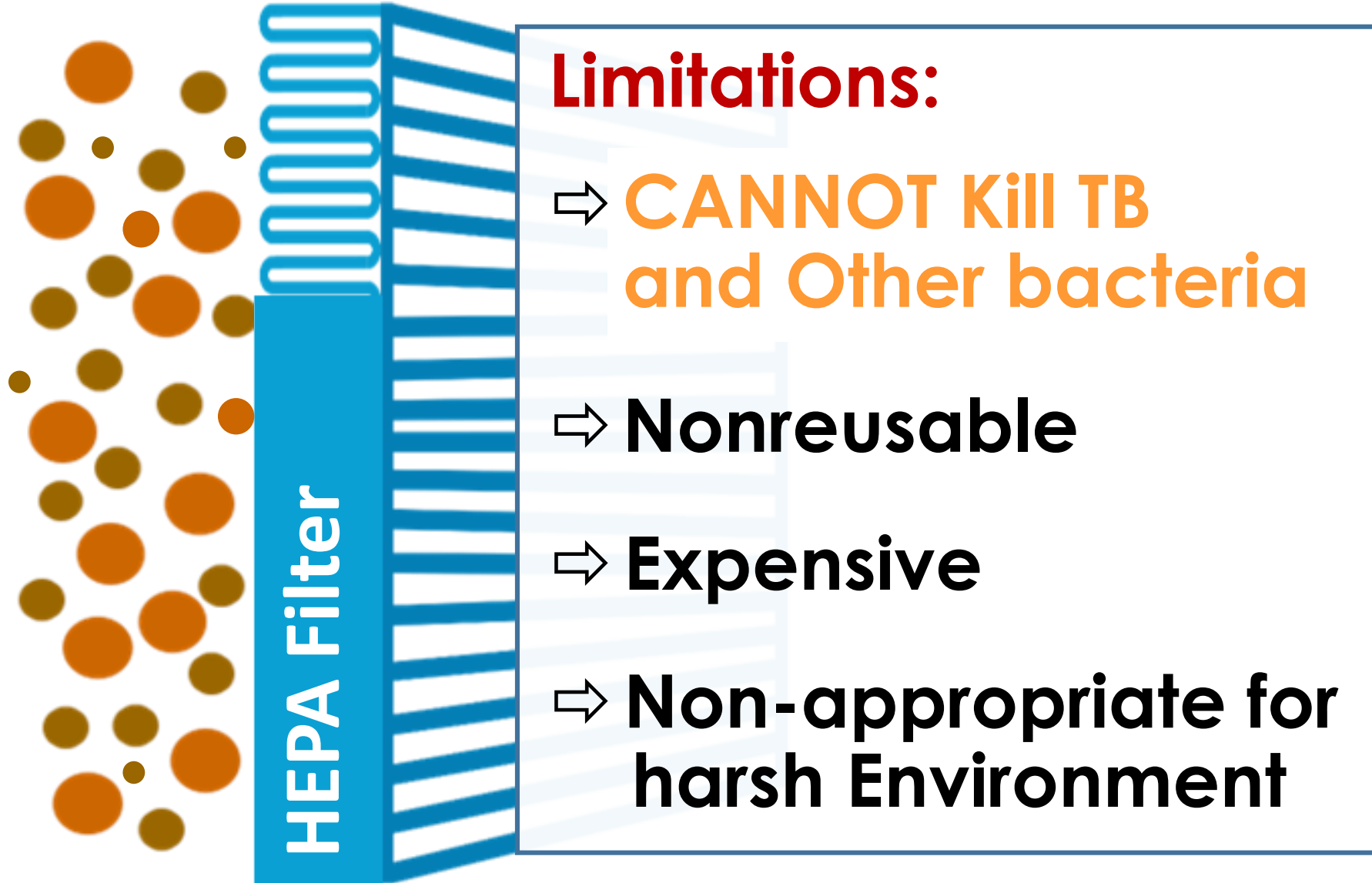
TB is one of the world's  
top health challenges:

**MORE THAN  
2.4 BILLION** PEOPLE,

equal to a **ONE THIRD**  
of the world's population are  
infected with TB



# Traditional HEPA air filter





# Why



# ?



## Fine filtration

### HEPA

0.3 Microns

< 0.3 Microns



## Anti-Bac (+/-)

X

≥ 99.9%



## Anti-TB

X

≥ 99.9%



## Reusability

X

Water resist/Anti UV



## Variety

Limited design

Flexible design



## Price

expensive

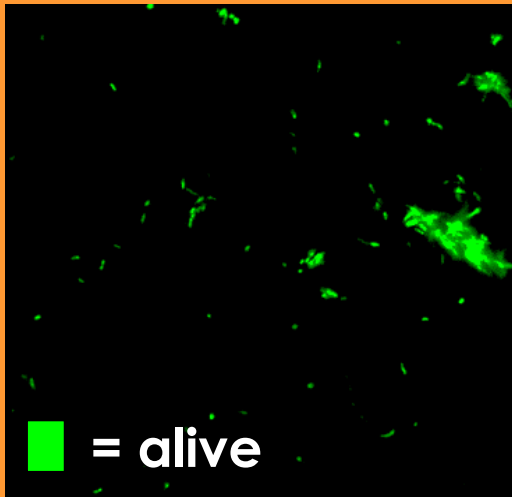
inexpensive



# “Trap & Kill” TB and others

Pilot test: TB-aerosol in Biosafety Cabinet Level 3

Control



■ = alive

N-breeze

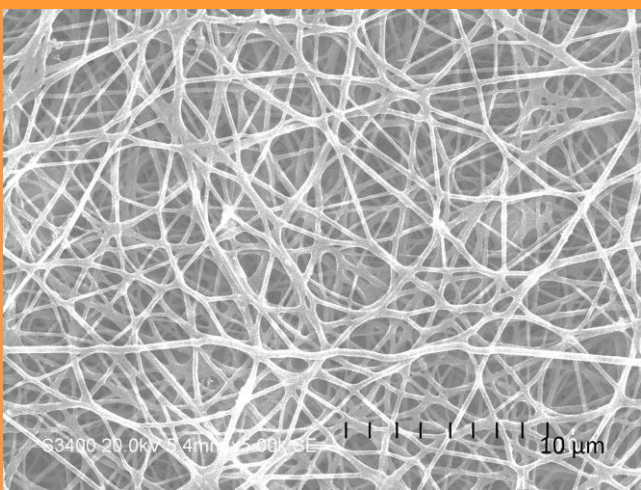


■ = dead



## Nanofibrous membrane

Fineness of fiber: Nanometer scale



- Thai Patent
- International Patent
- Peer-Reviewed Article
- Manufacturing Product
- Financial Feasibility



# Product Opportunities



Surgical mask

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**Personal**



Portable filter system

Cabin air filter

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**Household**



Ventilation system  
in clinic, clean room

Gas turbine plant filter

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**Industrial**

# Market Opportunity

## Market size of Air filters

Sources: euromonitor.com/thailand,  
maketeer.co.th,  
National Statistics Office



346,800 MB per year



847 MB

Per year



715 MB

Per year



# Business Model

## Potential Partners



- **Membrane manufacturer**
- **Filter manufacturer & assembly**
- **Air Filter/Purifier**
- **Startup**
- **Government**





# n-Breeze

Multifunctional Membrane

Be a partner

Be a leader of **Nano**membrane together

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