

The background features a dark blue cityscape at night with light trails from traffic. In the center, the letters 'AI' are rendered in a glowing blue, wireframe font. Behind the 'AI' text, a world map is visible, composed of a grid of blue dots connected by thin lines. The overall aesthetic is futuristic and technological.

AI is here
to stay, so
WATTS
next!

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Canada's Crisis, A Climate-Driven Shift To "Fire Weather"

Canada is warming at twice the global average rate due to its northern location. Rising temperatures, increasing evapotranspiration, and more frequent and severe fire weather conditions are causing more wildland fires to:

- Ignite readily
- Spread quicker
- Burn hotter
- Persist longer
- Affect larger areas and more people

Let Me Begin With Why AI Is Here To **STAY** And Why That Matters

- Assess the next chart for;
 - Accuracy
 - Clarity
 - Visual Impact
 - Volume of information shared
 - Effort required to create it
 -

VOLZ FILTERS PROTECTED BY C-POLAR TECHNOLOGY

PROVIDING PATHOGEN FREE AIR FOR CRITICAL AREAS

VOLZ
INTEGRITY IN FILTRATION

CONTAMINATED AIR
Enters the HVAC System



VIRUSES



BACTERIA



MOLD SPORES



FUNGAL SPORES



DUST & PARTICLES



CLEAN, PATHOGEN FREE AIR

Delivered to Critical Areas



CAPTURES & INACTIVATES PATHOGENS
Viruses, Bacteria, Mold & Fungi



CONSISTENT HIGH PERFORMANCE
Longer Filter Life



CLEANER AIR. SAFER ENVIRONMENTS.
For Patients, Staff & Visitors



PROTECTED BY C-POLAR TECHNOLOGY
Installed in HVAC Systems to Safeguard Critical Environments



IDEAL FOR CRITICAL AREAS
Operating Rooms • ICUs • Isolation Rooms
Clean Rooms • Laboratories

THE C-POLAR™ TECHNOLOGY ADVANTAGE



C-POLAR technology applies a permanent charge to the filter media fibers, creating an electrostatic field that attracts and captures microscopic particles and pathogens – and inactivates many of them on contact.

**STRONGER PROTECTION.
LONGER LASTING. SAFER RESULTS.**



SUPERIOR PATHOGEN CAPTURE & INACTIVATION

Helps reduce the risk of airborne infections



EXTENDED FILTER LIFE

Maintains efficiency longer, reducing changes and costs



ENERGY EFFICIENT

Lower resistance, optimal airflow performance



RELIABLE PROTECTION

Tested. Trusted. Engineered for critical environments.



PEACE OF MIND

Cleaner air for better outcomes where it matters most.

VOLZ FILTERS PROTECTED BY C-POLAR TECHNOLOGY – ENGINEERED FOR LIFE-CRITICAL AIR.

CLEAN AIR. SAFE CARE. BETTER OUTCOMES.

A Few Facts To Help With Your Assessment

Creating the preceding chart took about 10 seconds

- I utilized a new image creation feature offered as ChatGPT Images 2.0
- My entire involvement in the process was making the following request;
 - "Create an image showing how Volz Filters protected by C-Polar technology can provide pathogen free air for critical areas such as hospital operating rooms"
- Large language models (LLM's) are "trained" on virtually all available digital information sourced from across the web, enabling the seemingly "intelligent" assembly of outputs based on such training.
 - Think about what it means to "train" a model on literally all available digital data from around the world
- The estimates vary widely, but training Chat GPT-4 is estimated to use about 50GWh (Gigawatt hours) of power and months of system runtime.
 - A billion watts of power used for 50 hours would power thousands of homes in the US for a year

A very dark future could come about if this goes unchecked.

POWERING THE FUTURE. AT THE EXPENSE OF OUR NEIGHBORHOODS.



AI DATA CENTER
POWER USAGE

**1.2
GIGAWATTS**

1,200,000,000 WATTS



ENOUGH ELECTRICITY TO POWER
UP TO 900,000 HOMES



CONSUMES MORE POWER THAN
A SMALL CITY



BACKED BY BILLIONS IN CAPITAL.
LOCAL COMMUNITIES LEFT IN THE DARK.

BLACKED OUT BY PRIORITIES

RIISING POWER COSTS.
LIMITED SUPPLY.
NO LIGHTS. NO RELIEF.

REAL PEOPLE. REAL IMPACT.

– AI DATA CENTERS ARE
DRIVING ELECTRICITY DEMAND
TO UNSUSTAINABLE LEVELS.

COMMUNITIES CAN'T COMPETE.
PEOPLE PAY THE PRICE.

THEY CAN'T AFFORD TO COMPETE
FOR POWER.

**THEIR HOMES.
THEIR COMMUNITIES.
THEIR FUTURE.**

LEFT IN THE DARK.

As Noted At On the Title Slide Watts Next?

- Global TWh Growth: Goldman Sachs (April 2026) projects that **global data center power demand will surge 220% by 2030 compared to 2023 levels**. This would push consumption to roughly 1,350 Terawatt-hours (TWh) annually—surpassing the total electricity usage of Japan.
- In 2026, 6.4 GW of coal-fired capacity is scheduled to retire, which accounts for almost 4% of the U.S. coal fleet that was in operation as of the end of 2025. Coal retirements were expected to increase last year after they slowed down in 2024. However, only 2.6 GW out of an anticipated 8.0 GW of coal capacity were retired, as **the DOE issued emergency orders that temporarily postponed the retirement of large coal plants**. Any renewed or new emergency orders could affect retirements planned for this year as well. Per WWW.EIA.GOV

This is NOT a trend we want to see perpetuated



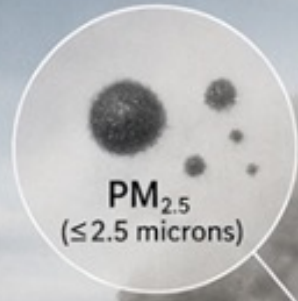
The Datang Tuoketuo Power Station is the world's largest operating coal-fired power plant, with a total installed capacity of (6.72 GW). Located in Hohhot, Inner Mongolia, China, this massive thermal facility was commissioned in 2003 and serves as a vital energy source for the region and the West-to-East power transmission initiative. In fairness, China also leads in renewable energy systems deployed.



The problem is simply that power plants do not exist in a vacuum. Vast populations are downwind of such plants and suffer the consequences, many of which we are only now becoming aware of.

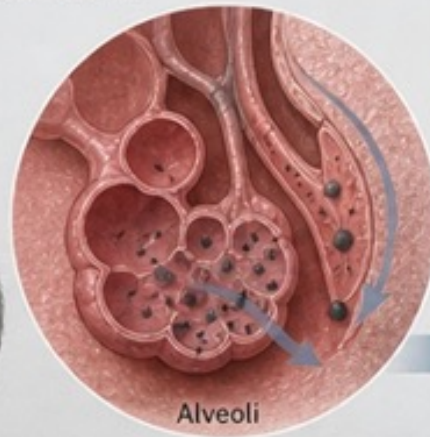
HOW 2.5 MICRON OR SMALLER PARTICLES REACH AND AFFECT THE BRAIN

Fine particulate matter (PM_{2.5}) can be inhaled, enter the bloodstream, and cross the blood brain barrier.



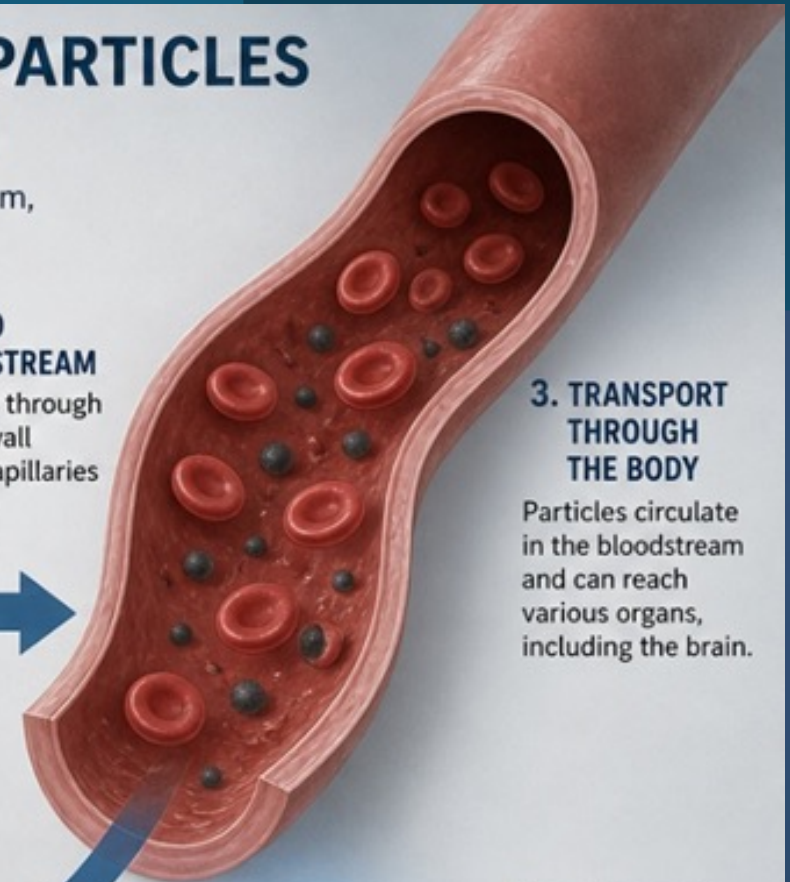
1. INHALATION

PM_{2.5} particles are inhaled deep into the lungs.



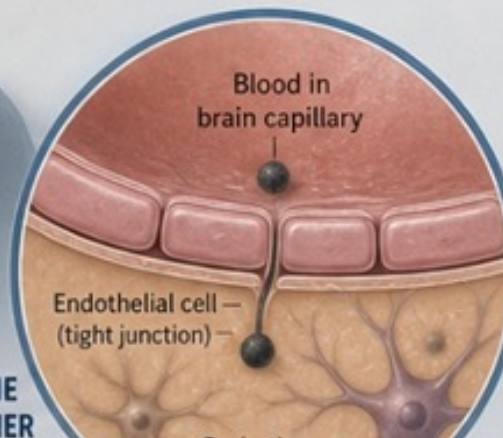
2. ENTRY INTO THE BLOODSTREAM

Particles pass through the alveolar wall into nearby capillaries and enter the bloodstream.



3. TRANSPORT THROUGH THE BODY

Particles circulate in the bloodstream and can reach various organs, including the brain.



4. CROSSING THE BLOOD BRAIN BARRIER

5. IN THE BRAIN

Particles can trigger inflammation, oxidative stress, and other harmful effects that may contribute to cognitive decline, neurodegenerative disease, and other



Watts Next?

“Behind the Meter” Datacenters
Powered by On-Site Generators

Project	Developer / Operator	Expected Power Requirement	Location	Status
Stargate AI Campus Network	Open AI / Oracle	10-15 GW / total target	Multiple U.S. sites	Expansion announced
Meta Louisiana AI Campus	Meta	Up to 1 GW	Louisiana, USA	Planned
xAI Colossus Expansion	xAI	Up to 2 GW	Memphis, Tennessee	Expansion underway
Meta Ohio AI Datacenter	Meta	~1 GW	Ohio, USA	Under construction
Hut 8 Beacon Point Campus	Hut 8	~1 GW planned campus	Texas, USA	Initial phase signed

Now Referred to

As

“Braggawatts”

Is The World Ending (at least from the AI power issue)

- **No**

- Hyperscalars (the big guys like MS, META, Amazon..) recognize AI's power challenges and are attempting mitigation by a variety of means
 - MS is having a traditional nuclear plant recommissioned to power an AI campus
 - Amazon is(has) purchased an AI campus powered by an existing nuclear plant
 - All players in AI have worked to purchase renewable power as is available
 - Several are exploring novel power options such as SMR's (Small Modular Reactors).

- **Maybe**

- In the near term many datacenters are being denied access to the power grid
 - Environmentally "dirty" and noisy power is being generated "behind the meter"
 - Time to market is far exceeding all other concerns

Second Order Effects Of On-Site Power Are Still Problematic

- On site capacity deployed still relies heavily on natural gas.
 - Vast quantities of CO₂ are produced when datacenters utilize “quickie” on-site power generation systems.
 - Climate change acceleration is inevitable if we stay on the present course
 - Operating massive GPU clusters as required to train AI systems require millions of gallons of water for use as coolant, depleting aquifers and reservoirs
 - Consumers now “compete” with AI Datacenters for natural gas instead of electricity, with the usual economic impacts

Solution? A Future SMR Based Power Plant In The Image of Henry Ford's Model T



“You can have it in any color as long as it is black”. A rough quote from Henry Ford as to the genius behind the Model T. The same thinking is now going into SMR's, Small Modular Reactors.

Some good news for a change

AI Is Here To Stay, So Deal With It

- AI specific datacenters will continue to drive economic challenges and climate change for the foreseeable future
- AI will be pervasive across all of society by 2030 if not earlier
- We cannot ignore its impact, nor contain it, so we **MUST** proactively mitigate its environmental and societal impacts
- Despite all the above, AI has vast potential for good if **ethical AI** becomes the norm, something yet to be accepted and acted upon.
- Climate impacts of coal plant “extensions” and wildfire events make more effective air filtration systems ever more critical.