



# ATMOSPHERIC HEAT REDUCTION (AHR)

REDUCES 'GLOBAL WARMING'.  
SCALABLE, INEXPENSIVE, DISTRIBUTED,  
GROUND BASED, ENVIRONMENT FRIENDLY,  
AND OPERATIONAL TODAY.

[AHRPrimer.pdf \(these screens\)](#)

[Further Reading: AHR Story.pdf](#)

image



<https://ahrnnow.com>

<https://ahrnnow.com/img/carousel/AHRStory.pdf>

[larry.danberger@nubium.com](mailto:larry.danberger@nubium.com)



# IS GLOBAL WARMING REAL?

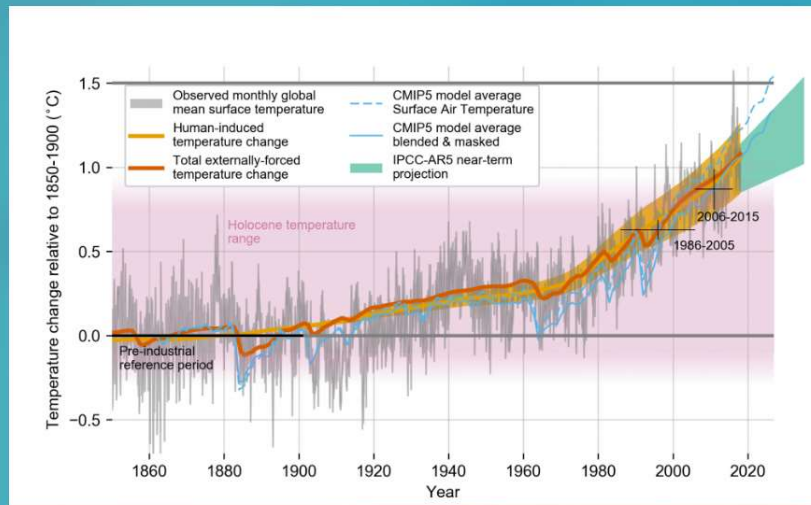
ACCORDING TO GROUPS SUCH AS IPCC AND A GREAT NUMBER OF SCIENTISTS, YES.

THIS CHART FROM IPCC SHOWS THE TEMPERATURE INCREASES CALCULATED AND MEASURED.

BUT NOT ALL PEOPLE BELIEVE THE ANALYSIS, SO WE NEED MORE 'PROOF'...

image

Source: IPCC





HOME

CONTACT

CALC TCO2E

# LOCAL TEMPERATURE

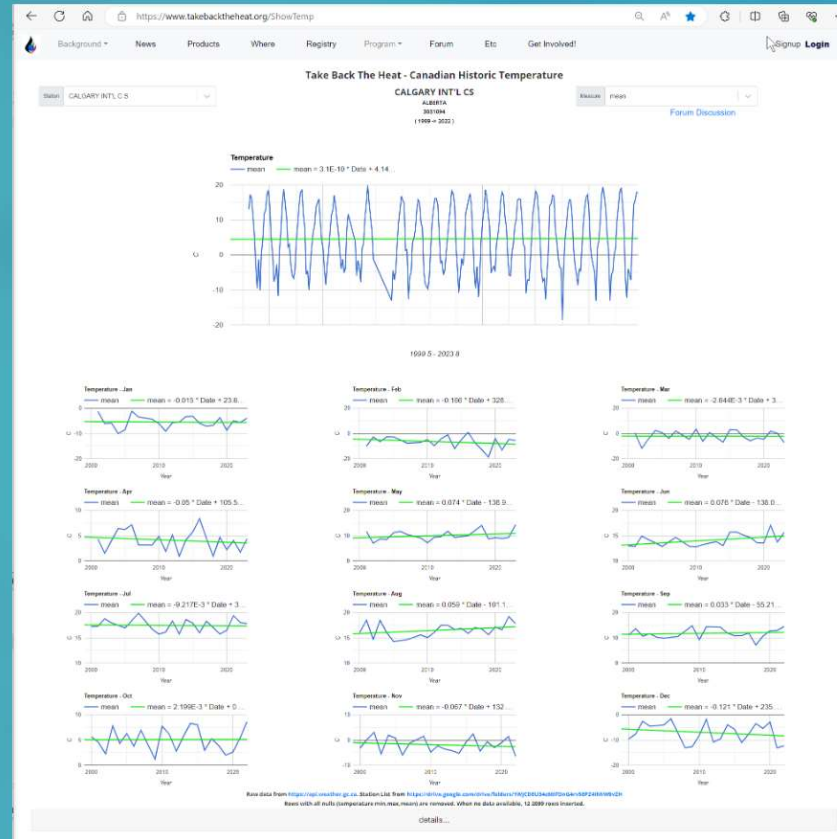
WHAT DOES RAW DATA SHOW?  
CANADIAN STATION RAW DATA  
(WEATHER.GC.CA) FROM RURAL AND URBAN  
AREAS GENERALLY SHOW THE MEAN OVER  
TIME IS INCREASING.

USE THE SOURCE LINK TO TRY OTHER  
STATIONS, OR FIND A TEMPERATURE HISTORY  
SOURCE FOR OTHER COUNTRIES, YOU WILL  
SEE SIMILAR TRENDING.

WHAT IS THE CAUSE?...

image

Source: TakeBackTheHeat.org





# GREENHOUSE GAS EFFECT

WHAT IS THE CAUSE OF RISING TEMPERATURE?

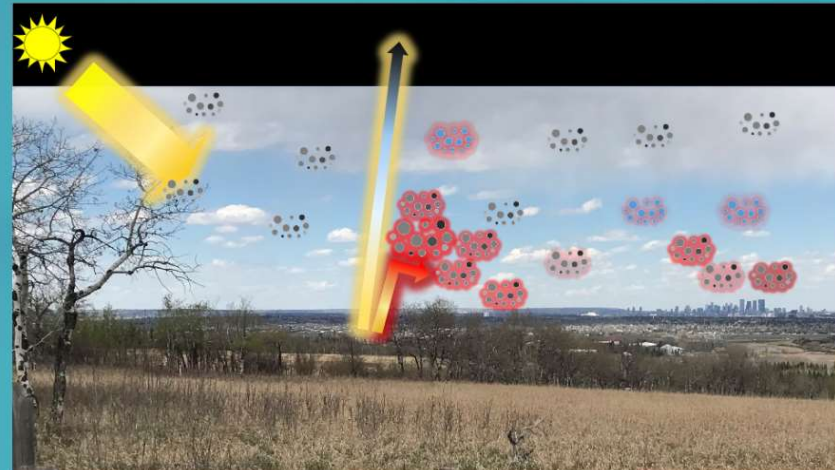
MAJORITY OF SCIENTISTS BELIEVE AN INCREASE IN CERTAIN GASES IN THE ATMOSPHERE ARE 'TRAPPING' HEAT, PREVENTING IT FROM ESCAPING TO SPACE.

*'IT IS THE BEST THEORY WE HAVE TO DATE' AS ONE EXPERT PUT IT.*

THE ENERGY BALANCE (BUDGET) HAS SHIFTED AS HUMAN ACTIVITIES RESULTED IN INCREASES IN CO<sub>2</sub>E, TRAPPING HEAT.

WHAT IS THE EARTH ENERGY BUDGET?...

image



# EARTH BUDGET

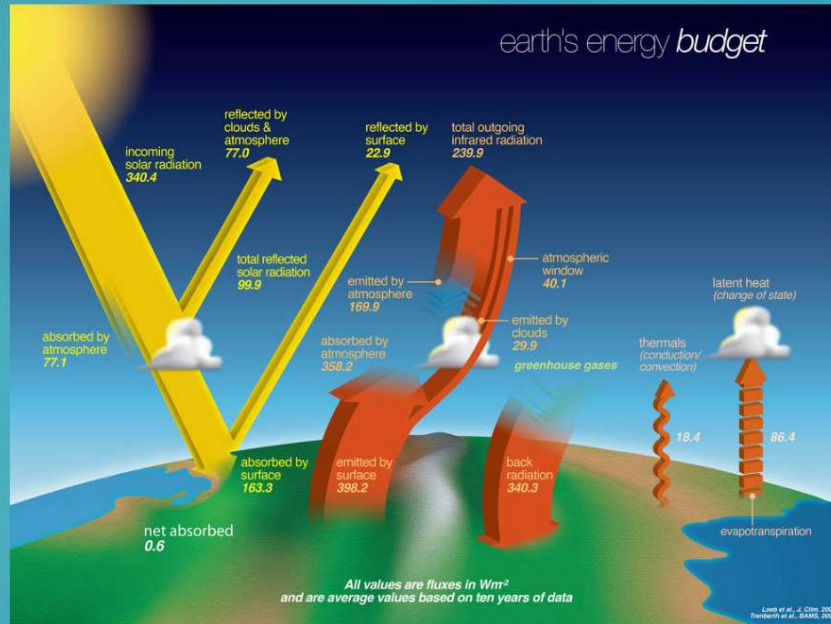
INCOMING RADIATION (HEAT) IS ROUGHLY EQUAL TO WHAT IS ABSORBED PLUS WHAT IS RADIATED BACK OUT TO SPACE.

INCREASE IN HUMAN ACTIVITY INCREASES THE GREENHOUSE GAS EFFECT WHICH RETAINS ADDITIONAL ENERGY.

HOW CAN AHR HELP?...

image

Source: NASA



# HOW AHR WORKS

RADIATED SOLAR ENERGY ARRIVES (DOWNGOING), SOME IS TRANSMITTED (UPGOING) AT INFRARED WAVELENGTHS WHICH CAN BE TRAPPED.

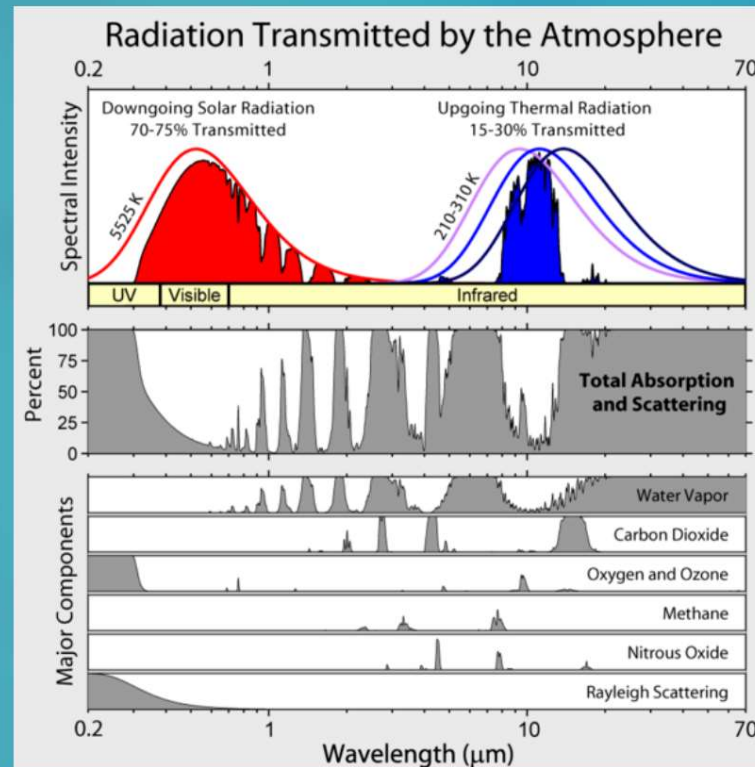
VARIOUS GREENHOUSE GASES ABSORB AND RETRANSMIT RADIATED ENERGY ('HEAT'), PREVENTING IT FROM LEAVING THE ATMOSPHERE. EACH GAS HAS UNIQUE CHARACTERISTICS AND ABSORBS RADIATION BASED ON THE WAVELENGTH OF THE ENERGY.

AHR EQUIPMENT RETRANSMIT THE ENERGY AS VISIBLE LIGHT, WHICH IS NOT TRAPPED BY GHGS SO REACHES SPACE, RESTORING BALANCE.

ANTICIPATED IMPACT?...

image

Source: wikimedia.org



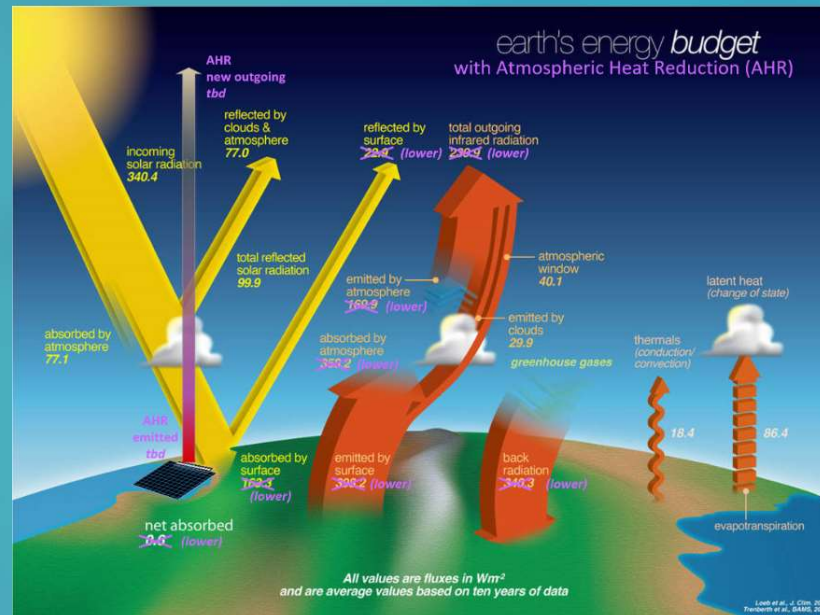
# EARTH BUDGET WITH AHR

MARKUP SHOWS WHERE AHR FITS IN AND WILL IMPACT THE BUDGET.

BY TRANSMITTING RECEIVED ENERGY TO SPACE INSTEAD OF IT BEING AVAILABLE FOR GREENHOUSE GASES TO CAPTURE, THE GLOBAL WARMING EFFECT IS REDUCED.

BY HOW MUCH?...

image





# IMPACT

AHR IMPLEMENTED GLOBALLY COULD RESULT IN A 1°C REDUCTION BY 2100. COMPARE THIS WITH OTHER SOLUTION COMPONENT IMPACTS USING TOOLS SUCH AS EN-ROADS TO UNDERSTAND THAT THIS IS NOT A SMALL AMOUNT. AT WHAT COST?...

image

Source: Climate Interactive | MIT Management







# COST BALLPARK

INDIVIDUALS NOT READY FOR DIY CAN GET INVOLVED STARTING AT 1 TONNE CO2E EQUIVALENT FOR LESS THAN \$100 CDN PER YEAR REQUIRING NO COMMITMENT NOR EQUIPMENT.

INDUSTRIAL IMPLEMENTATIONS CAN BE SCALED AS BUDGET ALLOWS, FOR EXAMPLE SHOWN ARE TWO COMPARISONS, 7 THOUSAND AND 1 MILLION CARBON CREDIT EQUIVALENTS (TCO2E) PER YEAR.

WITH AHR EQUIPMENT, SUBSEQUENT YEARS ARE MAINTENANCE ONLY, COMPARED TO THE NEED TO REPURCHASE CARBON CREDITS ANNUALLY.

## NEXT STEPS?...

image

Shop: [shop.takebacktheheat.org](https://shop.takebacktheheat.org)

Year	tCO2e	Current Credit Price	Current Credit Cost	Proposed AHR Cost	Proposed AHR Savings
1	7,000	50 \$	350,000 \$	900,000 \$	(550,000)
2	7,000	65 \$	455,000 \$	90,000 \$	365,000
3	7,000	80 \$	560,000 \$	90,000 \$	470,000
4	7,000	95 \$	665,000 \$	90,000 \$	575,000
5	7,000	110 \$	770,000 \$	90,000 \$	680,000
6	7,000	125 \$	875,000 \$	90,000 \$	785,000
7	7,000	140 \$	980,000 \$	90,000 \$	890,000
8	7,000	155 \$	1,085,000 \$	90,000 \$	995,000
9	7,000	170 \$	1,190,000 \$	90,000 \$	1,100,000
10	7,000	170 \$	1,190,000 \$	90,000 \$	1,100,000
<b>Total:</b>	70,000		8,120,000 \$	1,710,000 \$	6,410,000
<b>avg per tCO2e:</b>			116 \$	24 \$	
<b>Total savings over 10 years for 7,000 annual tCO2e:</b>					<b>\$ 6,410,000</b>

Year	tCO2e	Current Credit Price	Current Credit Cost	Proposed AHR Cost	Proposed AHR Savings
1	1,000,000	50 \$	50,000,000 \$	52,200,000 \$	(2,200,000)
2	1,000,000	65 \$	65,000,000 \$	5,220,000 \$	59,780,000
3	1,000,000	80 \$	80,000,000 \$	5,220,000 \$	74,780,000
4	1,000,000	95 \$	95,000,000 \$	5,220,000 \$	89,780,000
5	1,000,000	110 \$	110,000,000 \$	5,220,000 \$	104,780,000
6	1,000,000	125 \$	125,000,000 \$	5,220,000 \$	119,780,000
7	1,000,000	140 \$	140,000,000 \$	5,220,000 \$	134,780,000
8	1,000,000	155 \$	155,000,000 \$	5,220,000 \$	149,780,000
9	1,000,000	170 \$	170,000,000 \$	5,220,000 \$	164,780,000
10	1,000,000	170 \$	170,000,000 \$	5,220,000 \$	164,780,000
<b>Total:</b>	10,000,000		1,160,000,000 \$	99,180,000 \$	1,060,820,000
<b>avg per tCO2e:</b>			116 \$	10 \$	
<b>Total savings over 10 years for 1 million annual tCO2e:</b>					<b>\$ 1,060,820,000</b>





# NEXT STEPS

DOWNLOAD THE PAPER BELOW,  
LET'S TALK!

[contact](#)

Further Reading: [AHR Story.pdf](#)

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