

10 POWERFUL SECRETS ABOUT CLEAN ENERGY



AGENDA

OUR CLIMATE
CRISIS

A FEW
MINUTES

SUCCESS STORIES
& SECRETS

ABOUT
30 MINUTES

QUESTIONS
& DISCUSSION

A FEW
MINUTES



**FIRST,
THE BAD NEWS.**

**NO, FIRST,
A COMMERCIAL MESSAGE
FROM OUR 2030
UNITED NATIONS CEO.**

THE INCREDIBLE STORY OF GRETA THUNBERG



**AUG 2018: 15-YEAR-OLD
SWEDISH TEEN GOES ON STRIKE ALONE**

**FOR NUMEROUS WEEKS
NO ONE JOINED HER
'FRIDAYS FOR FUTURE'
CLIMATE STRIKE.
THEY HARDLY NOTICED HER.**

**AFTER A FEW TWEETS
SOME PEOPLE CAME.
GRADUALLY THE GATHERING
BEGAN TO GROW...**



Students around the world skip school ...
abcnews.go.com



Climate strikes around the w...
mercurynews.com



Planet Ark News - Students around the ...
planetark.org



Global climate strikes: Protesters ...
dailyrepublic.com



Climate strike: 'There's no Planet B ...
independent.ie



climate strike ...
washingtonpost.com



Students around the world skip school ...
abcnews.go.com



Less activism in schools? Morrison ...
theirsector.com.au



The Kids Are Taking Charge of Climate...
foreignpolicy.com



The best images from school strikes ...
climatechangeneews.com



Pictures From Youth Climate ...
nytimes.com



... global school ...



School climate strikes: Why kids ar...
cnn.com



Live updates: Global ...
cnn.com



School ...



...



School climate strikes: Why kids around ...
cnn.com



Climate strikes: School students across ...
scroll.in



School Strike for Climate: What Today's ...
insideclimatenews.org



Skipping School Around The World ...
wnpr.org



School students across the world to ...
news-talk.com



Thousands of school children strike for ...
independent.ie



One Girl from Sweden Sparked a Global ...
wiredocs.ca



Pictures From Youth Climate Strikes ...
pinterest.com



Skipping School to Strike ...
medium.com

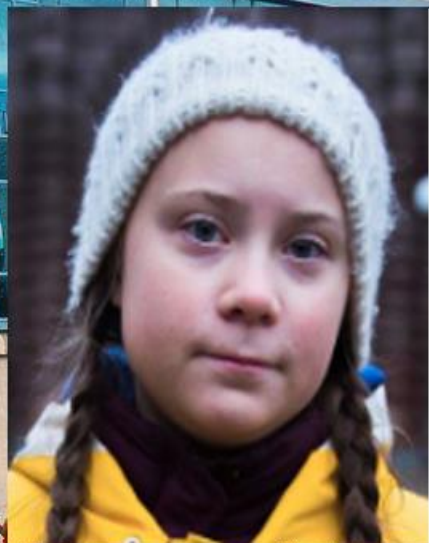


Global Climate Strike: Greta ...
time.com



AND GROW

2019: OUR CHILDREN ARE NOT AMUSED



~~2000+~~ **4500**
SCHOOL
STRIKES
IN ~~125~~ **150**
COUNTRIES



6,000,000 - 7,000,000
AROUND THE WORLD

2019: SCHOOL STIKES IN 4500 CITIES





**"YOU ARE ACTING LIKE CHILDREN
SO WE HAVE TO BE THE ADULTS"**

DAD, WHY
WASN'T SOME-
THING DONE ABOUT
GREENHOUSE
GASES BACK
IN 2014?

WE
WERE TOLD
IT WOULD COST
TOO MUCH.



THE CRISIS



RECORD HEATING

2001

2002

2003

2004

2005

2006

2007

2009

2010

2011

2012

2013

2014

2015

2016

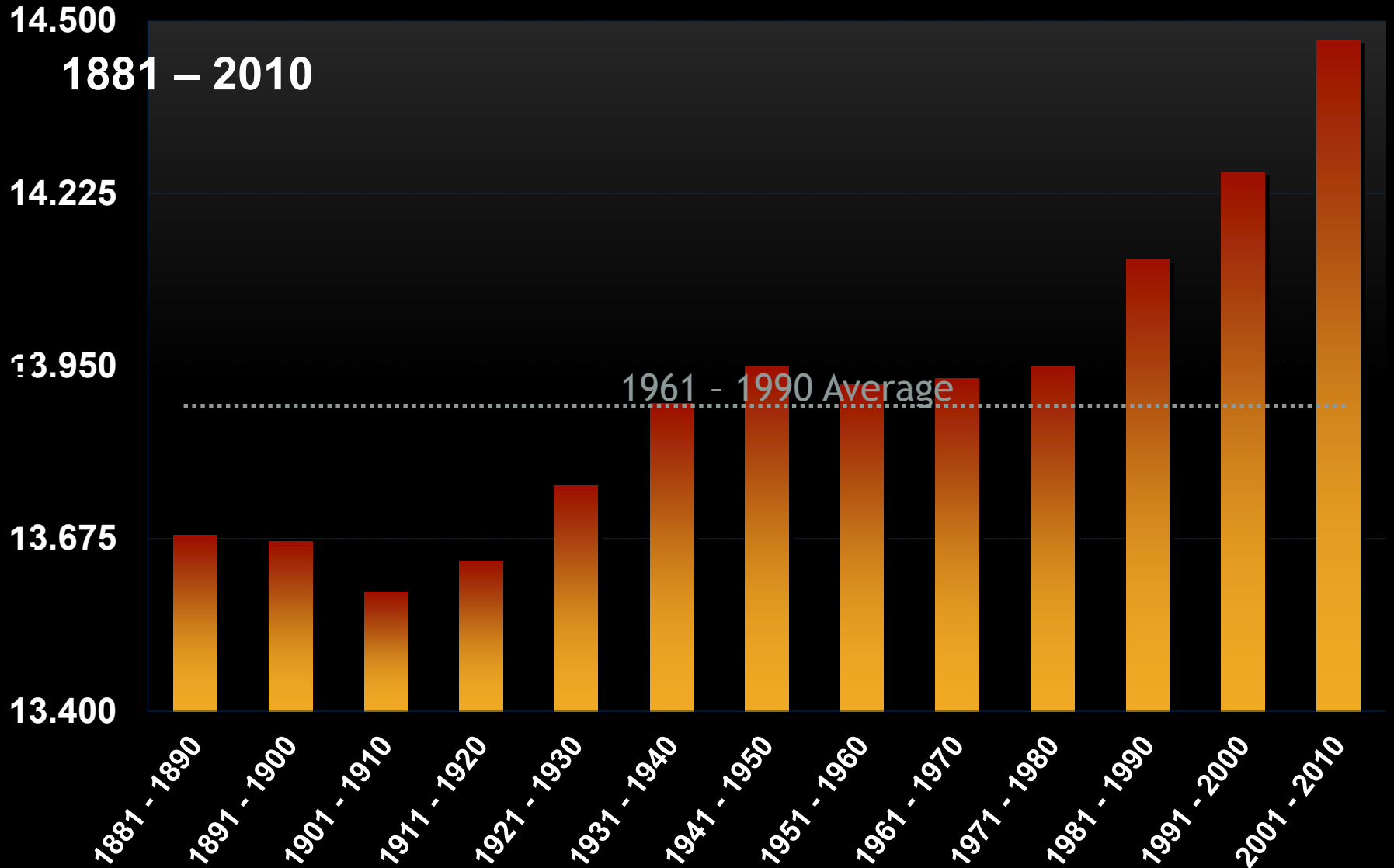
2017

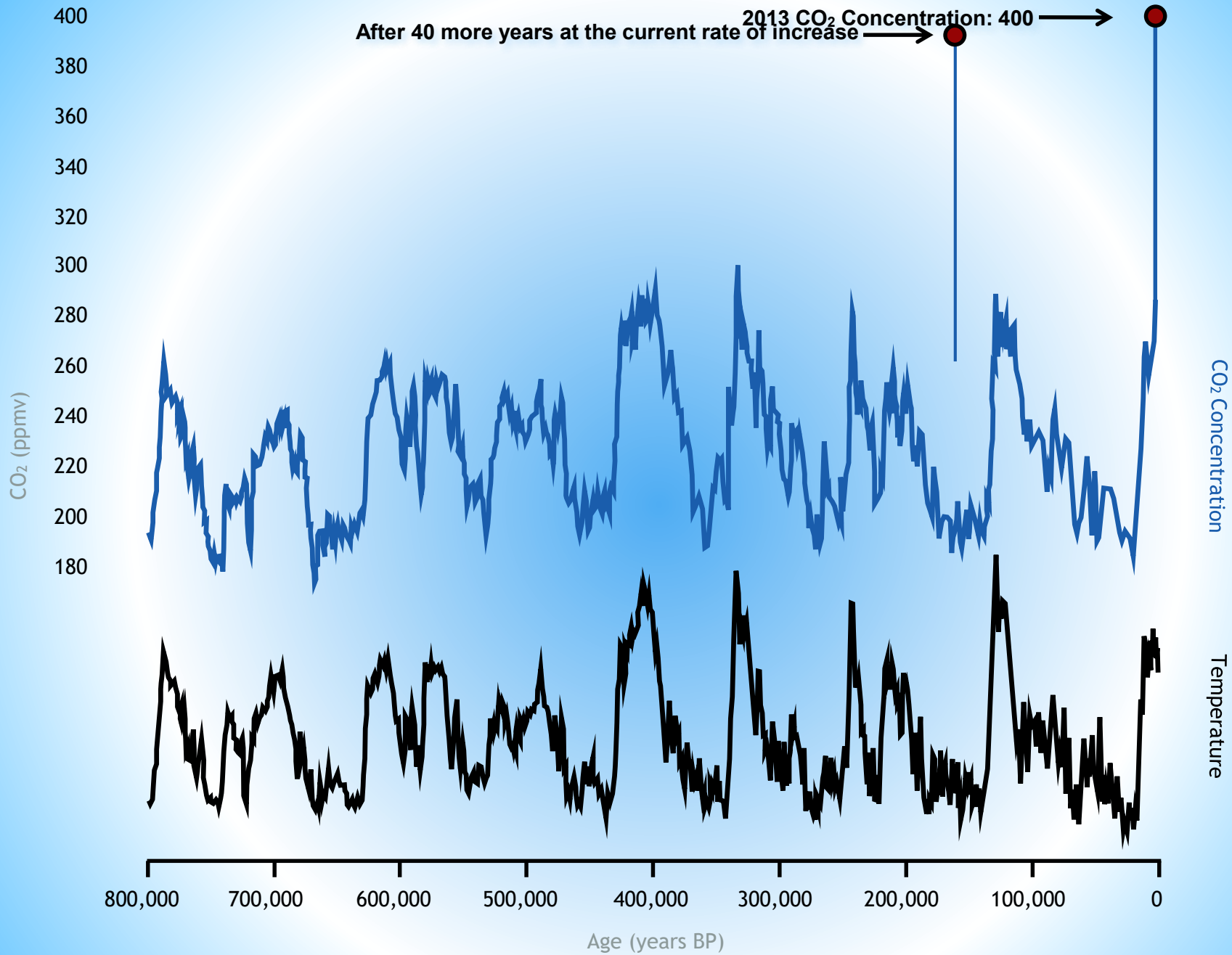
2018

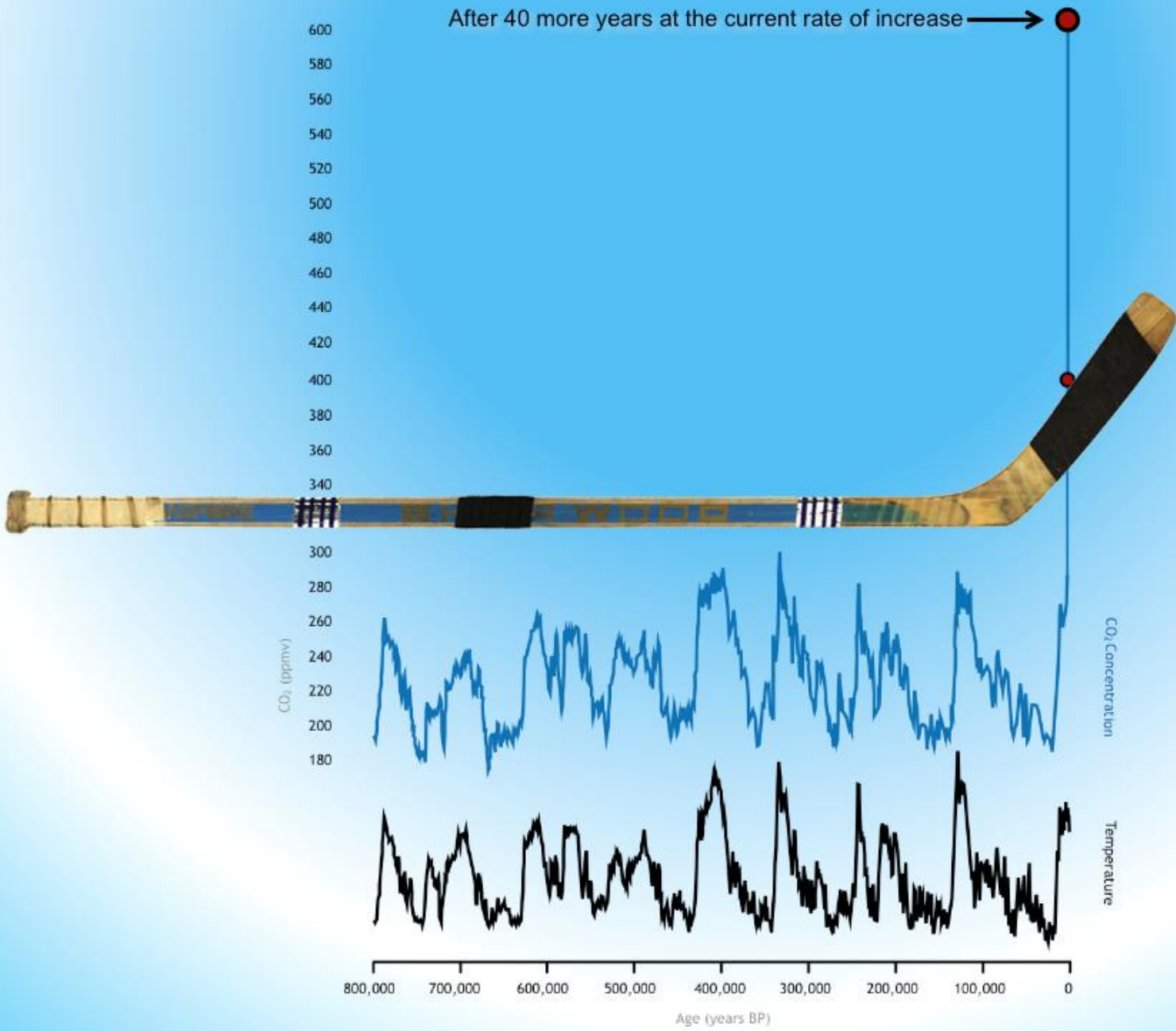
17 OF THE HOTTEST YEARS EVER
HAPPENED IN THE LAST 18 YEARS

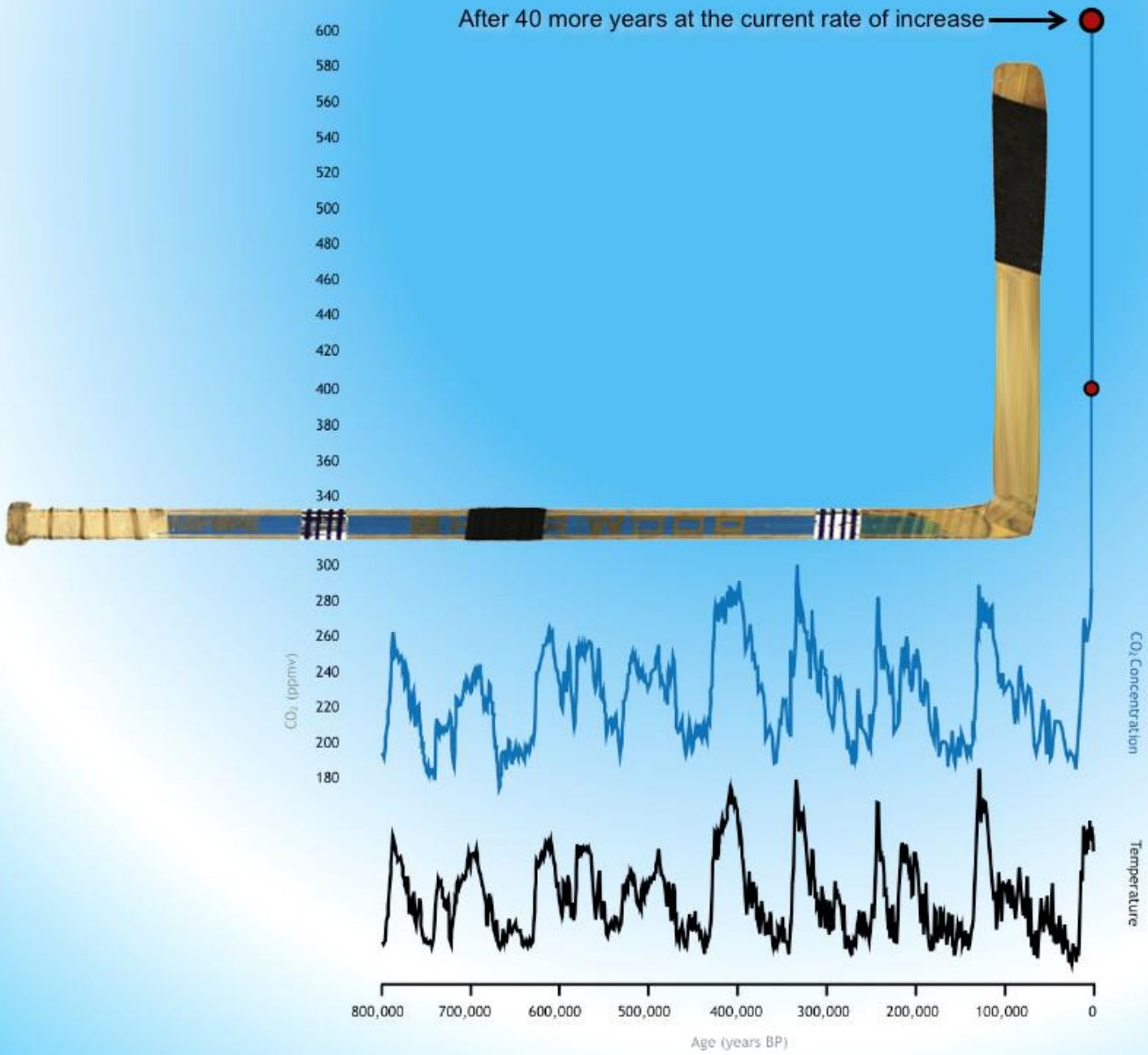
THE LAST 5 YEARS WERE
THE 5 HOTTEST YEARS EVER

GLOBAL TEMPS BY DECADE









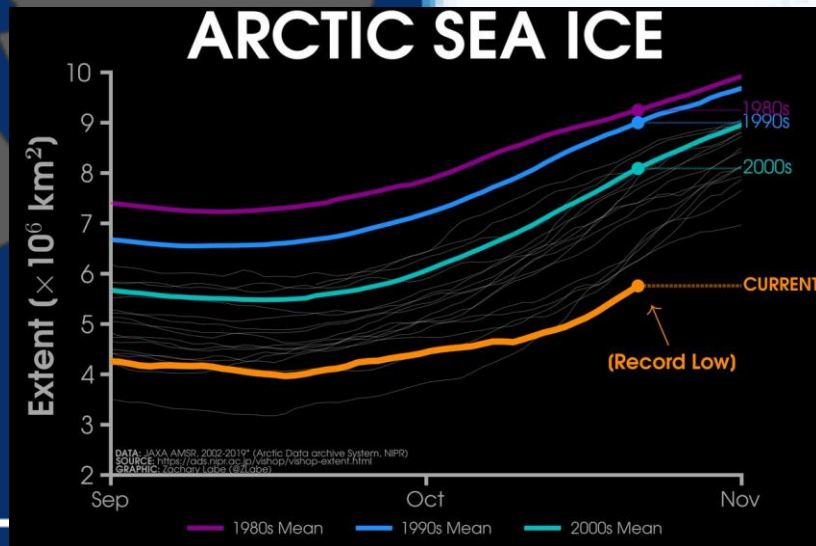
Arctic Sea Ice Extent

September 1984

Russia

Greenland

Canada



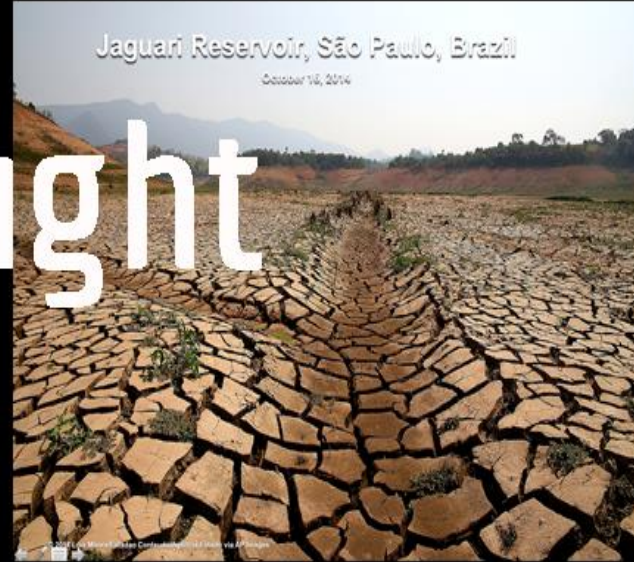
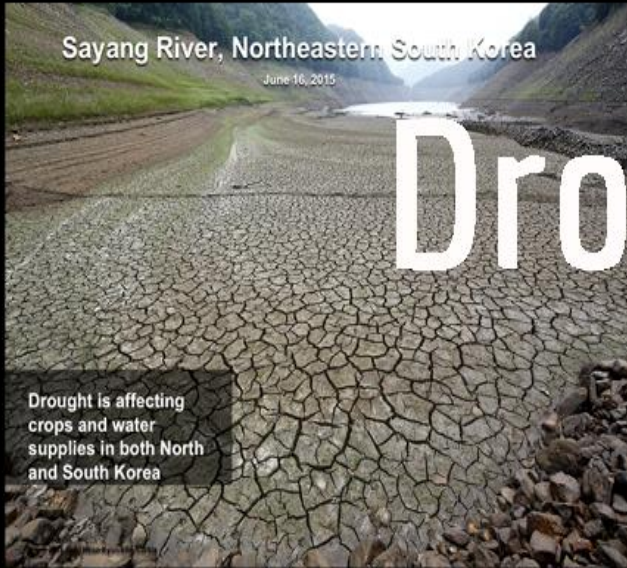
Sea Ice Concentration

0%

100%

Glaciers melting





Drought



FIRE



**BRITISH
COLUMBIA**



ALASKA



1 fire 145,321 acres

CALIFORNIA



86 deaths in Paradise, Ca.

SUPER-INTENSE WEATHER

MOISTURE IS RETAINED LONGER
AND THEN DUMPED DESTRUCTIVELY

FLOODING





THE WEATHER
IS CRAZY!

YEAH...
"THE
WEATHER"...

AMINA
2008



MIDWEST



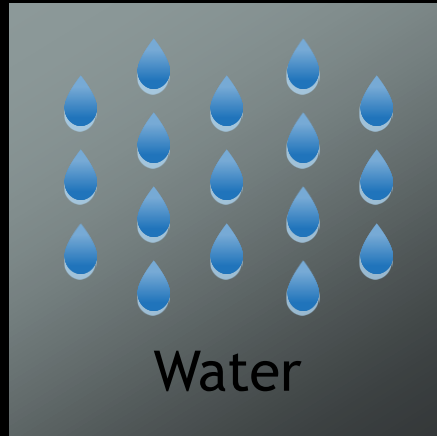
CITIES, COASTS



FUKUSHIMA NUCLEAR PLANT



PROBLEM SUMMARY



GLACIERS MELTING, FIRES, DROUGHT, INTENSE WEATHER,
FLOODING, GULF STREAM / CURRENTS DISRUPTED
COASTAL CITIES & NUCLEAR PLANTS UNDER WATER

DEFORESTATION, SPECIES & POLLINATORS EXTINCTION,
WATER SHORTAGES, FOOD SHORTAGES, DISEASE
PANDEMICS, SOCIAL & ECONOMIC INSTABILITY





IT'S GOING TO BE OKAY
WE'RE RECYCLING NOW

10 POWERFUL SECRETS ABOUT CLEAN ENERGY



COMMERCIAL MESSAGE

FROM ROWMAN & LITTLEFIELD OF WASHINGTON DC

ROWMAN &
LITTLEFIELD

TOP 10 LISTS



TOP 10 LISTS of climate action priorities for

Home Owners

Government People & Political Leaders

Business Managers & Executives

Investors & Entrepreneurs

Media, Teachers, Speakers & Entertainers

Salespeople, Servers, Retail & Customer Service

Urban Planners

Engineers, Architects & Tradespeople

Builders & Developers

Medical Professionals

Transportation People

Manufacturing & Agricultural Teams

MAKE A PLAN, MAKE AN IMPACT & WIN IN THE CLEAN ENERGY AGE

WELL RECEIVED SUCCESS STORIES & BEST PRACTICES

18 YEARS RESEARCH 190 FEATURE ARTICLES HUNDREDS OF EXPERTS

TOP 10 LISTS



ROWMAN &
LITTLEFIELD

amazon

BARNES & NOBLE

ORDER TODAY ONLINE OR AT YOUR FAVOURITE BOOKSELLER

IT'S TIME FOR A SELFIE



IT'S TIME FOR A SELFIE



#NobodyReallyActuallyCaresAboutThisPost

OUR CHANGING COUNTRY

CITIES ARE GOING GREEN



In general our largest cities are decarbonizing by approximately 2030. About 82% of Canadians live in cities and about 70% in the largest 10 cities.

FEDERAL POLICY



1. Market Transformation Roadmap for Energy Efficient Equipment in the Building Sector
2. Substantial new commitments (\$1.10 billion) to the Green Municipal Fund at the Federation of Canadian Municipalities
3. The carbon pricing and rebates of the *Pan-Canadian Framework*, developed by Canadian and provincial governments
4. Immediate Expensing for Clean Energy Equipment (Canada Revenue Agency)
5. Electric Vehicle and charger incentives
6. A Canada Training Benefit for clean energy technology launching in 2020.

STATESIDE CHANGE



**INDIANA: COAL CAPITAL
CHOOSES RENEWABLES**

STATESIDE CHANGE

The image shows three large, cylindrical cooling towers of a nuclear power plant. The towers are made of concrete and have a slightly flared top. They are set against a sky with scattered white clouds. The overall tone of the image is somewhat muted, with a green overlay at the bottom.

**ILLINOIS: WILL LIKELY
CLOSE 11 NUCLEAR REACTORS**

STATESIDE CHANGE

A landscape featuring several wind turbines on a hill under a clear blue sky, with large green prickly pears in the foreground.

**TEXAS: WIND LEADER
WITH 13,000 TURBINES**



**HAWAII: SOLAR ON
10% OF ROOFTOPS**



nyszerda
Energy. Innovation. Solutions.



**NEW YORK: PLANS THOUSANDS
OF GEOTHERMAL INSTALLS**



**GLOBALLY: EVs
3M TO 30M BY 2030**

CLEAN ENERGY HAS THE BEST ECONOMICS



ECONOMICS ARE
NOW WITH US

CHANGE IS HEADING
IN THE RIGHT DIRECTION

BUT WE NEED FAR MORE
MOMENTUM

SOLUTIONS & PRIORITIES



BUILDINGS

YOUR HOME OR ORGANIZATION'S BUILDINGS



TRANSPORTATION

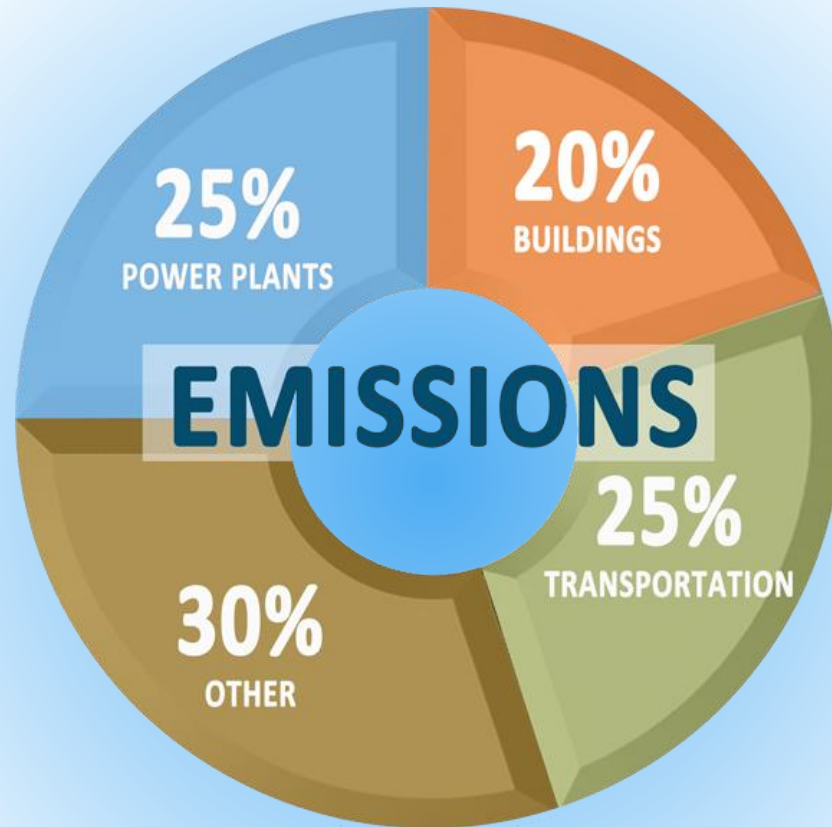
YOUR RIDE - ELECTRIC VEHICLES FOR INDIVIDUALS & FLEETS



POWER PLANTS & TRANSIT

YOUR VOTE & YOUR ORGANIZATION'S ACTIVITIES

SOLUTIONS & PRIORITIES



SIMPLIFIED BREAKDOWN OF GLOBAL CO₂ EMISSIONS
BASED ON INTERNATIONAL ENERGY AGENCY DATA

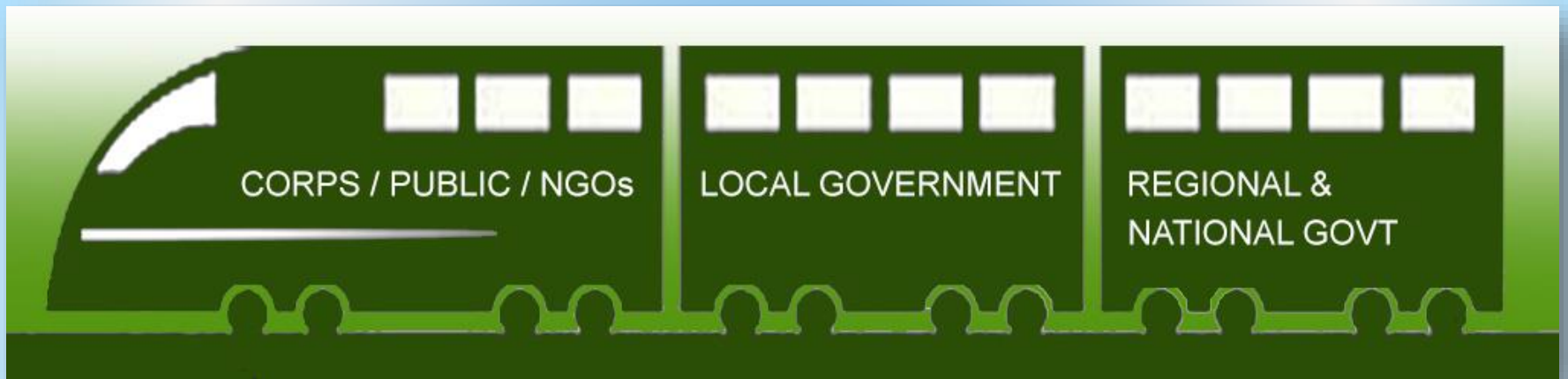
PRIORITIES



"Yes, the planet got destroyed. But for a beautiful moment in time we created a lot of value for shareholders."

MOMENTUM

THE CHANGE TRAIN IN DEMOCRACIES



WHAT WE DO AS INDIVIDUALS OR AS LOCAL GROUPS ABSOLUTELY MATTERS.
NATIONAL GOVERNMENTS DON'T LEAD, THEY FOLLOW.

CLIMATE
CHANGE

IT'S SETTLED...
WE AGREE TO SIGN
A PLEDGE TO HOLD
ANOTHER MEETING
TO CONSIDER CHANGING
COURSE AT A DATE
YET TO BE DETERMINED.

WORLD LEADERS



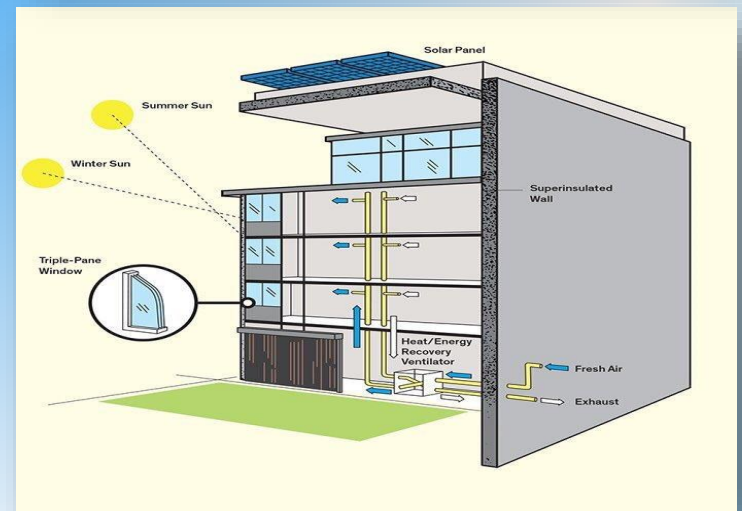
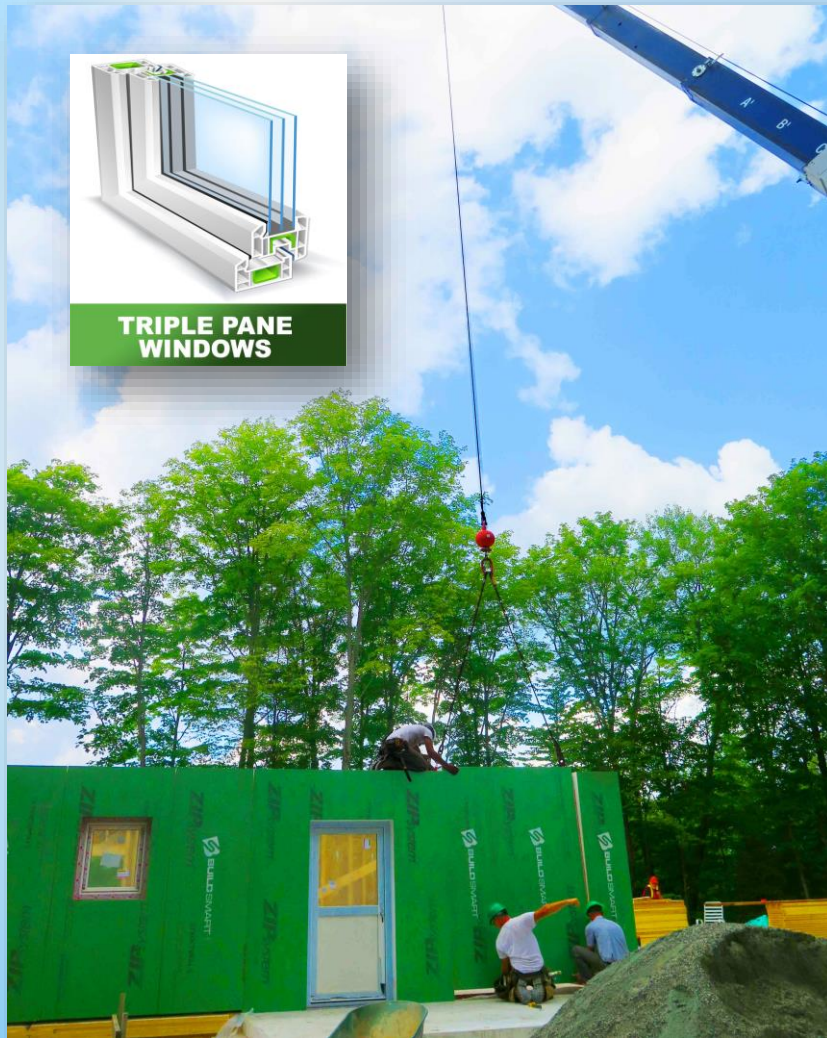
A modern two-story house with a large solar panel array on the roof. The house has a wooden exterior and large glass windows. A silver car is parked in the foreground. The text "WHAT IS PASSIVE HOUSE & WHY IS IT'S NEW POPULARITY GOOD?" is overlaid on the image.

**WHAT IS PASSIVE HOUSE & WHY
IS IT'S NEW POPULARITY GOOD?**

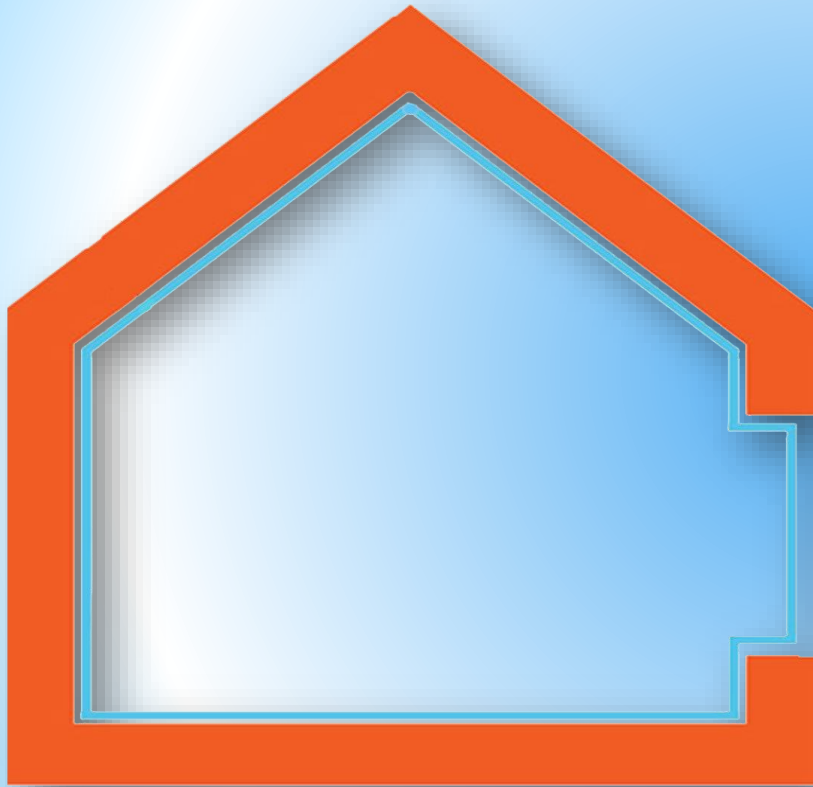
A modern, two-story house with a flat roof covered in solar panels. The house has large glass windows and doors, and is surrounded by greenery. In the foreground, a silver car is parked on a grassy area. The word "OUTCOMES" is overlaid in large white letters across the center of the image.

OUTCOMES

JOB 1: THERMAL ENVELOPE



WITH ENERGY THE BUILDING ENVELOPE IS CRITICAL



ENERGY DOES NOT
GET “USED UP”

ENERGY LEAKS OUT

WHEN THE BUILDING ENVELOPE
IS DONE CORRECTLY, ELECTRIC
BUILDINGS BECOME EASIER

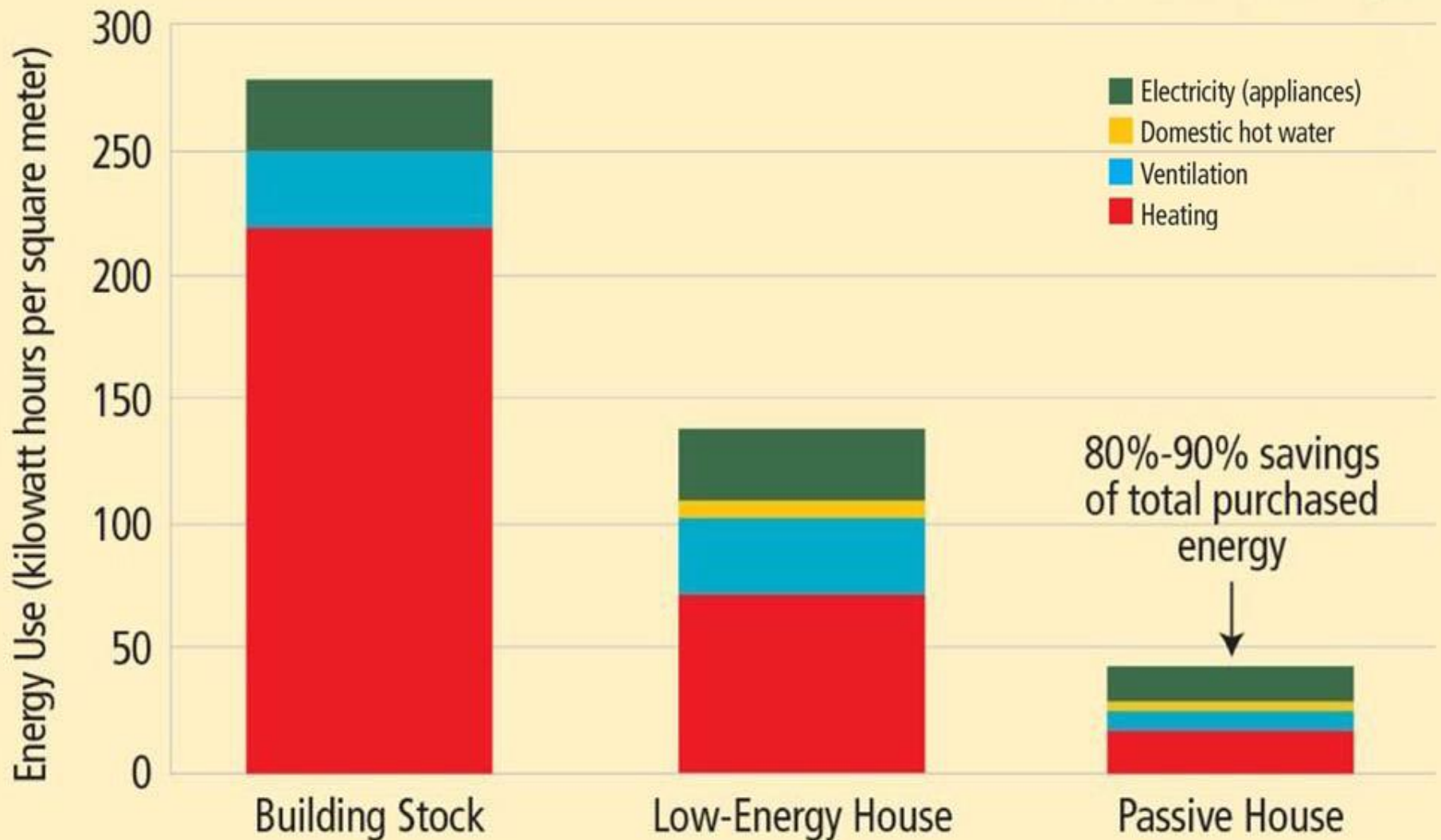
SECRET 1

SUPERINSULATION & GOOD WINDOWS
PAY BACK FAST, GENERALLY, IN 6-36 MONTHS.

GRAVY AFTER THAT.



PASSIVE HOUSE REDUCES ENERGY 80% - 90%



PASSIVE HOUSE MAKES ELECTRIFYING AFFORDABLE

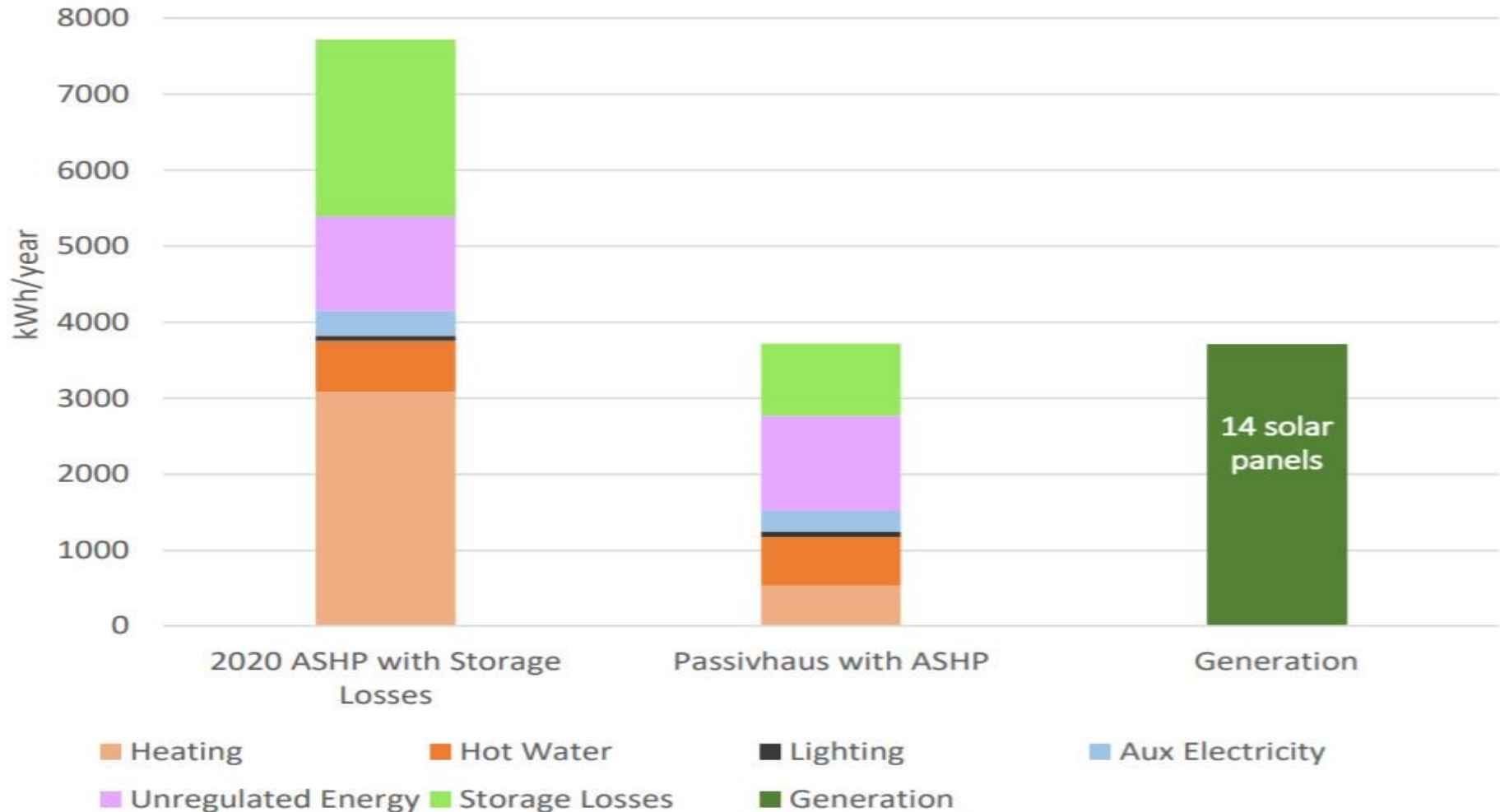


Figure 4 - Average new build energy demand vs Passivhaus

SECRET 2

YOU DON'T NEED A FURNACE

CLEAN ENERGY
-PROVEN IN
COLD CLIMATES

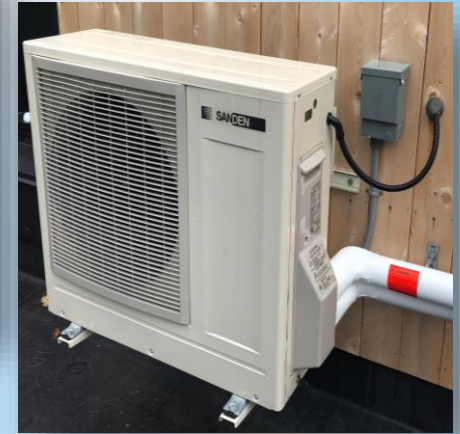
AIR SOURCE HEAT PUMPS
& SMALL COILS

ENERGY RECOVERY
VENTILATORS

SOLAR & GEOTHERMAL



YOU DON'T NEED A FURNACE



ONTARIO PASSIVE HOUSES



JIM & JOAN JOSEPH
NO FURNACE IN MINDEN
70% SAVINGS



GODERICH



COLLINGWOOD

WESTERN CANADA



VANCOUVER



CALGARY



VICTORIA, BC



SASKATOON



SASKATOON

AMERICA



USA



中国



CHINA

TOKYO



JAPAN

DEUCHLAND



GERMANY

EUROPE



SPAIN & FRANCE

UNITED KINGDOM



UK

SINGAPORE & AUSTRALIA



PACIFIC

HIGH RISE



SECRET 3

PASSIVE HOUSE COSTS LESS

RANGING FROM 0% - 9%
UP FRONT CONSTRUCTION
COST PREMIUM

OPERATING COST 25%-45% !

AFFORDABLE HOUSING:
26, 42, 57 AND 65 UNITS
RESPECTIVELY



WOODSTOCK



OTTAWA



PORTLAND, OR



BOSTON

A HEALTHY, COMFORTABLE HOME
THAT COST THE SAME TO BUILD AND LESS TO OPERATE

OTHER MUNICIPAL PH

GERMANY POOL, VERMONT
SENIORS RESIDENCE, SURREY
COMMUNITY CENTRE, PITTSBURG
SENIORS

POOLS & HOT TUBS HUGE
SAVINGS WITH PASSIVE HOUSE
& WITH SOLAR THERMAL



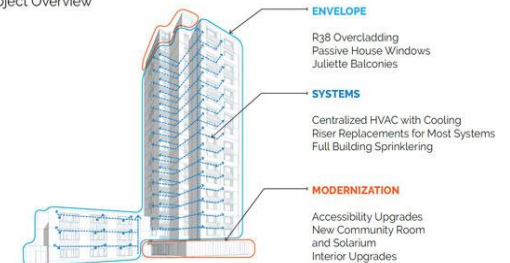
OUR RETROFIT CHALLENGE CAN ONLY REALLY BE MET WITH BETTER ENVELOPES



HAMILTON RETROFIT



Ken Soble Tower Transformation Project Overview



AN INCONVENIENT TRUTH

A REASSURING LIE



Bennett

RETROFIT CHALLENGE MET HUGELY



TONY MALKIN

EMPIRE STATE BUILDING

**WINDOWS, MINIMAL INSULATION, LIGHTS,
VARIABLE SPEED HVAC UPGRADE**

\$13 M INVESTED / \$4.4 M YEAR SAVINGS

53 OTHER BUILDINGS

SECRET 4

OUR PREFAB FUTURE

MULTI-FAMILY PRE-FAB

REMOTE OFF GRID PREFAB PH



SIDEWALK LABS TORONTO

GOOGLE/ALPHABET/WATERFRONT

FUTURISTIC URBAN HIGH TECH

3,000+ RESIDENTIAL UNITS

MODERN TRANSPORT PLANNING

UNDERGROUND CITY/ROBOTICS/DATA

CLEAN ENERGY & WATER RE-USE





ELECTRIFICATION: SOLAR, STORAGE, MICROGRID



SECRET 5

GEOHERMAL



GEOHERMAL COMMUNITIES

An aerial rendering of a modern, sustainable urban community. The scene features a mix of housing styles, including colorful townhomes and multi-story apartment buildings with balconies and green roofs. A central road with a bus lane and pedestrian sidewalks is lined with trees and greenery. The background shows a dense cityscape under a clear blue sky.

**EDMONTON'S NEW BLATCHFORD CARBON NEUTRAL COMMUNITY
217-HECTARE 30,000 PEOPLE, GEOHERMAL, SOLAR, DRAIN WATER
HEAT RECOVERY, 100% RENEWABLE POWER**

GEO THERMAL COMMUNITIES

LULU ISLAND, RICHMOND, BC GEO COMMUNITY
FIVE PHASES, SAVED 2340 TONNES OF EMISSIONS
3100 RESIDENCES, A WAL-MART,
OTHER RETAIL, DAYCARE, ETC.



GEOHERMAL IN SCHOOLS

QUEBEC SCHOOLS

SAVE \$18M

DROPPING FOSSIL FUELS

SAMARES SCHOOL BOARD

52 SCHOOLS

GEOHERMAL, SOLAR,
& CERAMIC THERMAL STORAGE



OLVIER MATTE & MICHEL MORIN

ENGINEERING FIRM SIGNS CONTRACT FOR GUARANTEED ENERGY SAVINGS
& ONGOING MAINTENANCE

SAME KIND OF CONTRACT FOR 3 LAVAL HOSPITALS, BIODOME &
OLYMPIC STADIUM MODERNIZATION. USED FOR GOVT BLDGS IN COLORADO

GEO THERMAL FOR CONDOS

THIRD PARTY
'UTILITY' MODEL

564 CONDOS
LILLIAN PARK IN
DOWNTOWN TORONTO

370 UNITS WESTWOOD
GARDENS
RICHMOND HILL

IMPROVES THE HEALTH
OF THE PLANET & FAMILIES.



GEOHERMAL FOR CONDOS

TIM WEBER'S
TORONTO ENGINEERING
FIRM DIVERSO &
QUEBEC FINANCIER
OWN, MAINTAIN & OPERATE
GEO SYSTEM

20 YEAR TERM AFTER WHICH
CONDO ASSOC CAN BUY OUT

DEVELOPER: REDUCES CAPITAL
BUDGET & TECH UNCERTAINTY

FIRST-TIME BUYERS: LOW,
PREDICTABLE MAINTENANCE FEES



GEOHERMAL NEW YORK



**NEW YORK WILL
FUND UP TO
85,000 GEOTHERMAL
SYSTEMS**

**DANDELION INSTALLS
FREE - CUSTOMER
PAYS \$135 PER MONTH**



GEO THERMAL NEW YORK



NEW YORK WILL
FUND UP TO
85,000 GEOTHERMAL
SYSTEMS

DANDELION INSTALLS
FREE - CUSTOMER
PAYS \$135 PER MONTH



RYAN D
GEO NY
CRAZY BUSY

SOLAR FOR SCHOOLS



TDSB (TORONTO) SCHOOL BOARD
311 SCHOOLS SOLAR
PLUS NEW ROOFS

THIRD PARTY FINANCING
LEASEBACK/NET METER

SCHOOLS REDUCED EMISSIONS, SAVED ENERGY
& RECEIVED FREE ROOF REPLACEMENTS

AFTER 20 YEARS ALL SCHOOLS OWN SYSTEMS.

SECRET 6

BATTERIES ARE THE BIG STORY IN SOLAR
EG. PEAK SHAVING PRIVATE SECTOR MICROGRIDS



SOKA UNIVERSITY CALIFORNIA

INSTITUTIONAL PEAK SHAVING

300 & 100 KILOWATT

BATTERIES & LOAD MANAGEMENT

SOFTWARE - NO UP FRONT COST

AFTER LEASE COSTS

NET SAVINGS WERE

\$55K IN THE FIRST YEAR

WILL INCREASE EACH YEAR TO ABOUT \$100K IN YEAR 10



ENERGY SAVINGS TRANSLATE TO GHG FOOTPRINT REDUCTIONS

SELF LEARNING SOFTWARE IMPLEMENTS STORAGE DECISIONS AUTOMATICALLY

SECRET 7

MONEY FOR HOMEOWNERS & SMALL BIZ IS MORE AVAILABLE

CLEAN ENERGY FUNDING MODELS



1	Local Improvement Charge aka PACE LIC with GOVT backstop
2	Utility model aka Energy Service Agreement aka Guaranteed Energy Savings
3	Green bond Green bank Foundation
4	Modern bank loan with IREE from ICP
5	Government incentive eg Feed-In Tariff or energy upgrade
6	Many other bank & financial instruments/arrangements

LIC OR PACE PROGRAMS

HALIFAX
& 125 OTHERS

ZERO DOWN
10-YEAR LOAN
AT 4.75% INTEREST

UTILITY SAVINGS
COVER PAYMENTS

LOAN IS ON THE PROPERTY TITLE - NO EFFECT ON SELLING DECISIONS

NO BURDEN ON NON-PARTICIPATING TAXPAYERS



THIRD PARTY FOR BIGGER DEALS

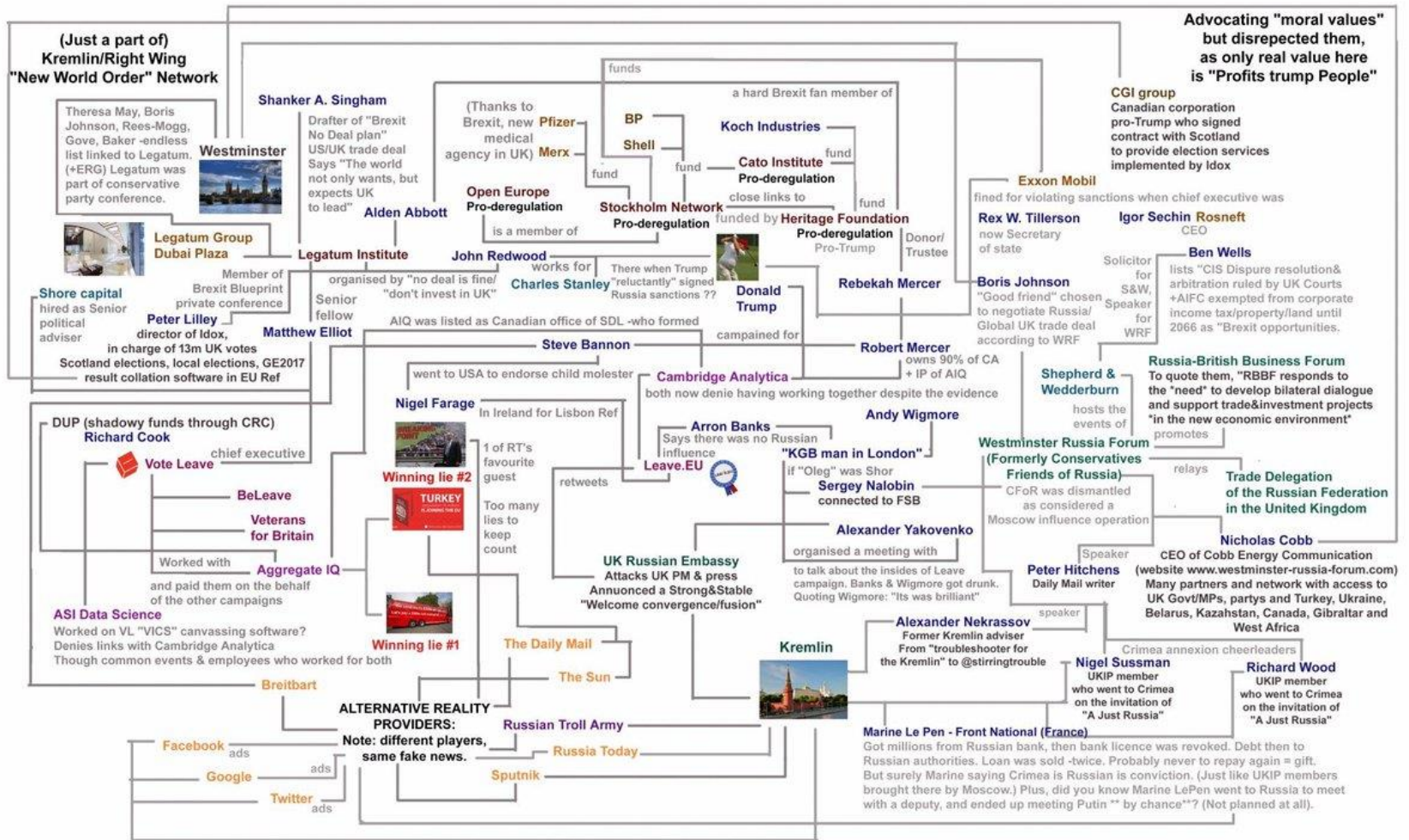
KUAKINI MEDICAL CENTRE
212 BED HOSPITAL IN HONOLULU

\$5.8 MILLION CLEAN TECH HVAC
EQUIP OWNED BY AN INVEST
CO/ENGINEER FIRM

ENERGY SAVINGS
& MAINTENANCE GUARANTEED



'SIMPLE' OWNERSHIP STRUCTURE



Note: Pro-deregulation means no "trade barriers" like laws protection people, health, labour rights, the animals or the environment - ie exactly what UK Parliament just endorsed by EU withdrawal bill votes.

THIRD PARTY

KUAKINI MEDICAL CENTRE
212 BED HOSPITAL IN HONOLULU

\$5.8 MILLION CLEAN TECH HVAC
EQUIP OWNED BY AN INVEST
CO/ENGINEER FIRM

ENERGY SAVINGS
& MAINTENANCE GUARANTEED

HOSPITAL SAVES MORE ON POWER THAN THE PAYMENTS (\$1.1 M YR)
ZERO UP FRONT COST, ZERO RISK.



MODERN BANK LOAN WITH IREE FROM ICP

INVESTOR READY
ENERGY EFFICIENCY
(IREE)

INVESTOR CONFIDENCE
PROJECT (ICP)



THIRD PARTY ENGINEERING PANEL VERIFIES PROJECT ENERGY SAVINGS, PROVIDES IREE CERTIFICATION

REDUCES BANK RISK AND THEY PROCESS LOAN BASED ON TRADITIONAL CREDITWORTHINESS

SECRET 8

ELECTRIC VEHICLES OFFER GREAT VALUE

MANY ELECTRIC CARS COST \$30K - \$50K
SINGLE CHARGE RANGE IS NOW 300+ KM

PURCHASE INCENTIVES \$3000 - \$10,000

IF YOU SPEND \$3500 ON
FUEL & MAINTENANCE EACH YEAR
THIS WILL LIKELY DROP
TO \$1500 OR LESS

OVER 10 YEARS YOU SAVE \$20,000



NY CITY FLEET VEHICLES



591 FULLY ELECTRIC VEHICLES (WITH HYBRIDS 1919)

690 CHARGE STATIONS, 86 SOLAR CARPORTS

GHG OF ENTIRE FLEET CUT BY 50% BY 2025 (2000 FULLY ELECTRIC)

SAVING 80% ON FUEL, 65% ON MAINTENANCE

AMAZON HAS ORDERED 100,000 ELECTRIC DELIVERY VANS

RIVIAN IS TOOLING UP IN MICHIGAN NOW

RIVIAN IS ALSO PARTNERING WITH FORD & POSSIBLY GM



CITY BUSES & SCHOOL BUSES



LIFETIME SAVINGS \$400,000.00

CHINA HAS 421,000 ELECTRIC BUSES

TORONTO, VANCOUVER, LA, MARTHA'S VINEYARD, SWEDEN, CHILE,
NETHERLANDS MANY OTHERS ARE ORDERING

IN 20 YEARS THERE WILL BE NO DIESEL BUSES

THE DEATH OF TESLA HAS BEEN GREATLY EXAGGERATED

TESLA IS SELLING 350,000 - 400,000 VEHICLES / YEAR
CARS ARE PROFITABLE WITH HEALTHY MARGIN
THEY LEAD THE MARKET IN THE USA & EUROPE
STARTING PRODUCTION IN CHINA



HIGHEST RATED *MOTOR TREND*

& *CONSUMER REPORTS*

HIGHEST SAFETY RATING

HIGHEST RESALE VALUE

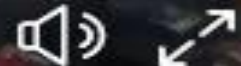
HIGHEST CUSTOMER LOYALTY

SHORT SELLERS ARE HURTING



9,071 views

0:03 / 0:24



UN-FAKE ELECTRIC VEHICLE NEWS



RYDER	150
RYDER HAS ORDERED	500 MORE
NEW YORK CITY	591
NEW YORK CITY	2000 BY 2025
UPS	300
FRITO LAY	280
LA POLICE	100
VANCOUVER	100
DHL	45
PACIFIC GAS & ELECTRIC	HUNDREDS



ELECTRIC VEHICLE NEWS



ELECTRIC VEHICLE NEWS



TESLA SEMI

UPS	125
PepsiCo	100
TCI	50
Sysco	50
Walmart	45
J.B. Hunt	40
Anheuser-Busch	40
Loblaw Co	25



FORD/RIVIAN & GM



WHO WILL KILL THE ELECTRIC CAR?





HORNSDALE POWER RESERVE SOUTH AUSTRALIA



COST \$66M
SAVED \$40M IN YEAR 1 ON FCAS
GAS PLANTS NOT RENEWED
PANELS/BATTERIES FOR 50,000 HOMES

**HORNSDALE POWER RESERVE
SOUTH AUSTRALIA**

POWER SYSTEM REINVENTION



HAWAII



55,000 PANELS & 52 MWH OF BATTERIES -
SAVE ON DIESEL & GHG
17 MEGAWATTS
(OVER 100,000 HOMES)



PUERTO RICO



NEW HYDRO SYSTEM
COMMITS TO RENEWABLES
NO MORE BEING HELD HOSTAGE
ALSO 1000 TESLA POWERWALLS

RENEWABLE POWER





100,064 views | Jun 15, 2019, 02:39pm

Renewable Energy Is Now The Cheapest Option – Even Without Subsidies

 **James Ellsmoor** Former Contributor 
Under 30
A Forbes 30U30 entrepreneur and founder of the Virtual Island Summit.

TWEET THIS

-  unsubsidized renewable energy is now most frequently the cheapest source of energy generation
-  These new statistics demonstrate that using renewable energy is increasingly cost-effective compared to other sources, even when renewables must compete with the heavily-subsidized fossil fuel industry

RENEWABLE POWER PLUS BATTERIES COSTS LESS THAN COAL POWER, GAS POWER AND NUCLEAR POWER.

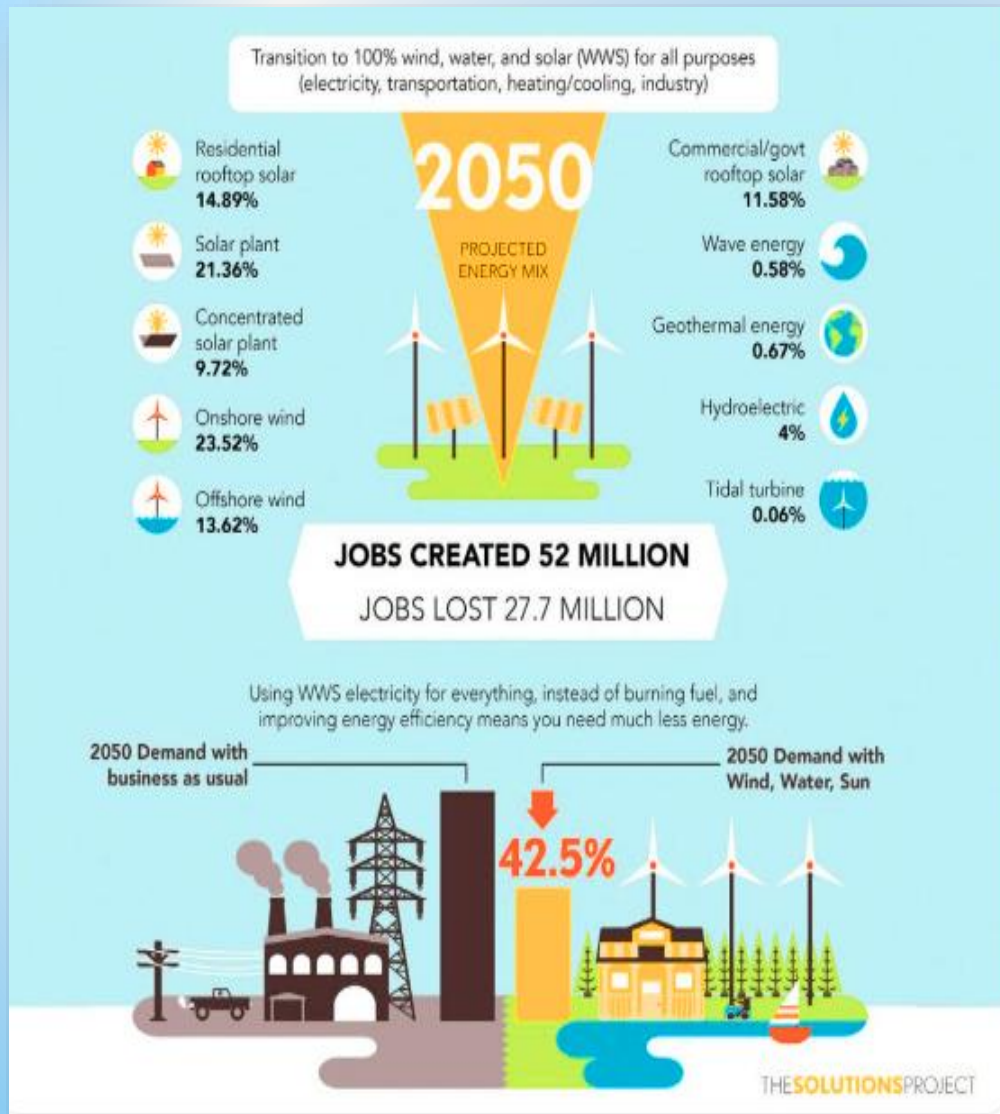
INVESTMENT IN NEW RENEWABLES & STORAGE EXCEEDS INVESTMENT IN FOSSIL FUEL GENERATION. ABOUT 84% OF NEW RENEWABLES IN THE PAST DECADE WERE WIND & SOLAR.

RENEWABLES NOW ACCOUNT FOR ONE-THIRD OF GLOBAL POWER CAPACITY.

RENEWABLE POWER



“BASED ON (NUMEROUS STUDIES) I CAN CONFIDENTLY STATE THAT THERE IS NO TECHNICAL OR ECONOMIC BARRIER TO TRANSITIONING THE ENTIRE WORLD TO 100 PERCENT CLEAN RENEWABLE ENERGY WITH A STABLE ELECTRIC GRID AT LOW COST,” -PROFESSOR MARK JACOBSON, STANFORD.



SECRET 9

The image is a composite landscape. In the background, several white wind turbines stand on a green hill under a clear blue sky. The middle ground features a large array of blue solar panels. The foreground is dominated by a field of tall, green grass with brown seed heads, partially obscuring the solar panels. The overall scene represents renewable energy sources in a rural setting.

**AS OF 2020 WITH WIND, SOLAR & STORAGE,
NOW COMING IN AT THE LOWEST COST
AND CONSIDERING OUR PARIS CLIMATE ACCORD,
COAL, GAS & NUCLEAR POWER GENERATION
ARE NOW OBSOLETE.**

SECRET 10

CLEAN ENERGY WILL COST NOTHING

IT'S JUST TECHNOLOGICAL PROGRESS LIKE MOBILE PHONES OR DIGITAL CAMERAS
IN ECONOMIC TERMS IT'S A VALUE-DRIVEN INVESTMENT

>>SUPERINSULATED BUILDINGS COST LESS TO OPERATE

>>ELECTRIC VEHICLES COST LESS TO OPERATE

>>WIND, SOLAR & STORAGE
COST LESS THAN COAL, GAS & NUCLEAR POWER

>>CLEAN ENERGY ALSO REDUCES PUBLIC COST FOR
HEALTHCARE
PROPERTY DAMAGE
INSURANCE

>>REDUCES BUSINESS COSTS FOR BUILDINGS,
FLEETS, POOR PRODUCTIVITY & MUCH MORE.



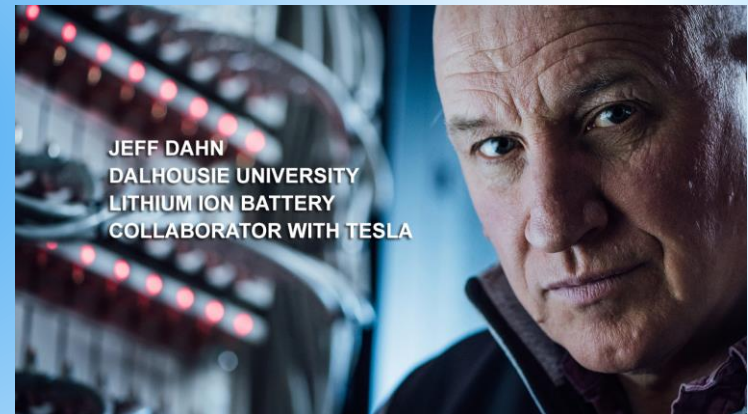
BONUS SECRET:

CLEAN ENERGY OPPORTUNITY

CLEAN ENERGY IS A HUGE JOB CREATOR, ECONOMIC STIMULANT & MULTI-TRILLION \$ ECONOMIC OPPORTUNITY FOR LEADING COUNTRIES

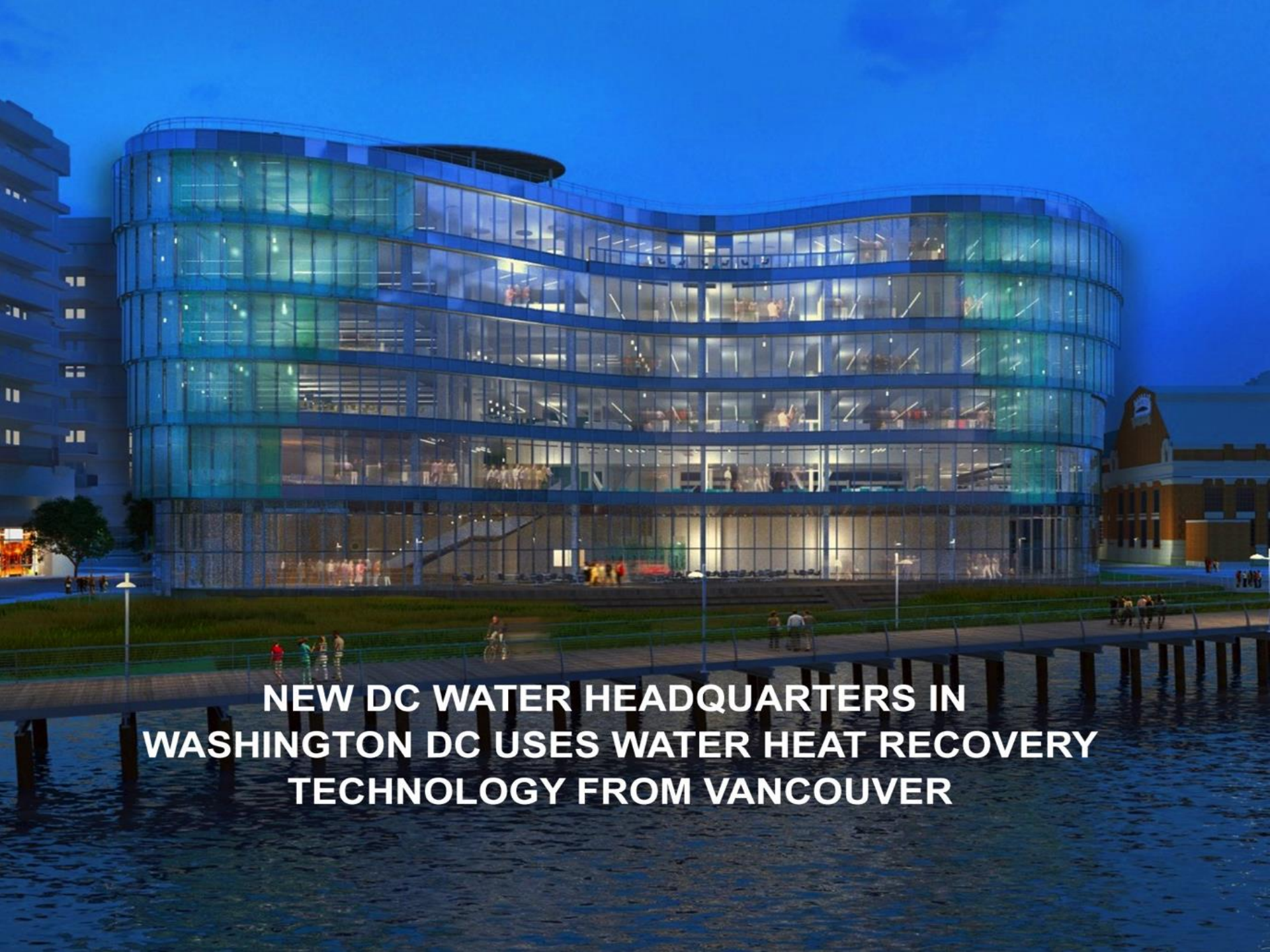
CANADA IS A WORLD LEADER IN

- >>ELECTRICITY STORAGE
- >>LOAD MANAGEMENT SOFTWARE
- >>(ALSO CYBER SECURITY,
SATELLITE COMMUNICATIONS, ROBOTICS)
- >>NATURAL REFRIGERANT SYSTEMS
- >>WATER SYSTEMS FOR CITIES & BUILDINGS
- >>CLEAN ENERGY GOVERNMENT PROGRAMMING
- >>ELECTRIC BUSES
- >>ELECTRIC FERRY BOATS
- >>LITHIUM ION BATTERY TECHNOLOGY EXPERTISE
- >>HYPERLOOP TRANSPORTATION





**JEFF DAHN
DALHOUSIE UNIVERSITY
LITHIUM ION BATTERY
COLLABORATOR WITH TESLA**



**NEW DC WATER HEADQUARTERS IN
WASHINGTON DC USES WATER HEAT RECOVERY
TECHNOLOGY FROM VANCOUVER**

ECONOMICALLY VIABLE HYPERLOOP DESIGN BY TRANSPOD, OF TORONTO



Sebastien Gendron & Ryan Janzen

WORLD LEADER

ELECTRICITY STORAGE, LOAD MANAGEMENT,
MICROGRID SOFTWARE & CYBER SECURITY



ONT EXAMPLES:

STEM

KINETRICS

HYDROSTOR

SURVALENT

NSTOR

N-DIMENSION

ARDA POWER

POWIN

CONVERGENT

IHI ENERGY

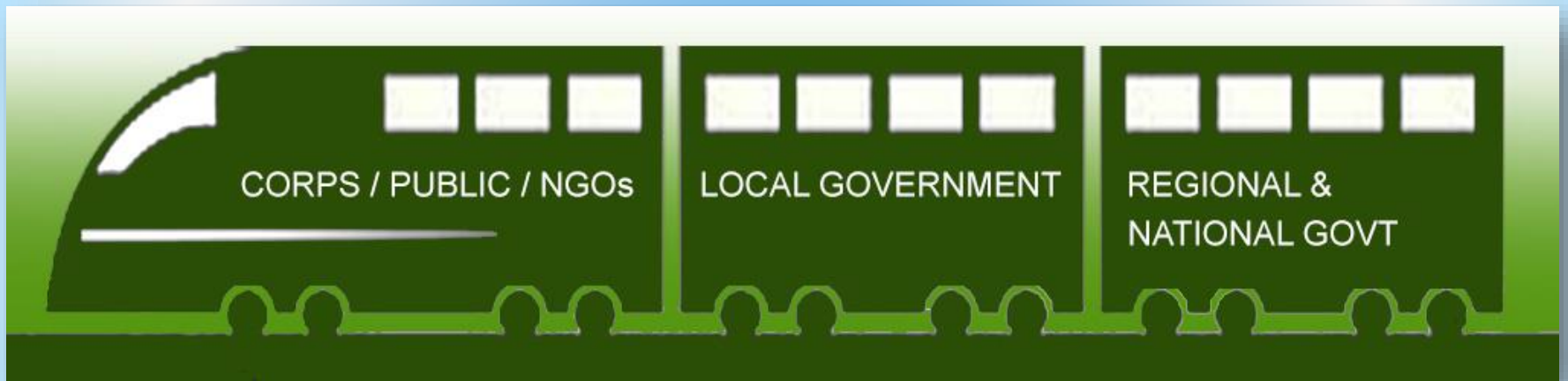
ECAMION

**WORLD LEADER
IN
HYPERACTIVE
POWERPOINT
PRESENTATIONS!**



CANADA IS
ONE OF THE WORLD LEADERS
IN PER CAPITA
GREENHOUSE GAS EMISSIONS

MOMENTUM THE CHANGE TRAIN







THANK YOU

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