

DRAWDOWN

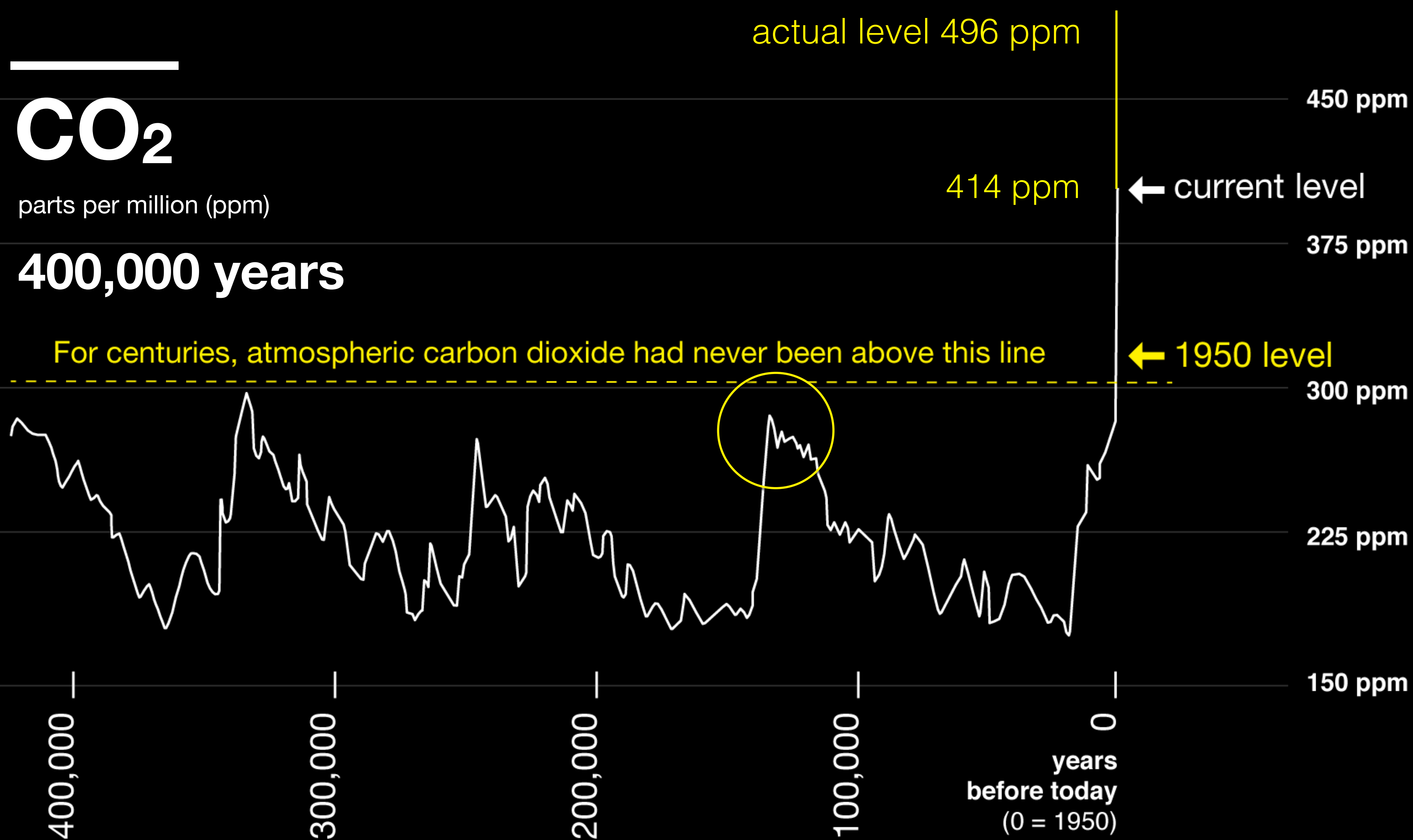
Where do we stand?

CO₂

parts per million (ppm)

400,000 years

For centuries, atmospheric carbon dioxide had never been above this line



Game Over?

Scientific American

1. Forego Fossil Fuels
2. Move Closer to Work
3. Consume Less
4. Be Efficient
5. Eat Smart

Union of Concerned Scientists

1. Change the car you drive
2. Make your house air tight
3. Use power strips in home entertainment ctr
4. Wash clothes in cold water
5. Buy less stuff

NEW YORK TIMES BESTSELLER

DRAWDOWN

THE MOST COMPREHENSIVE
PLAN EVER PROPOSED TO
REVERSE GLOBAL WARMING
EDITED BY PAUL HAWKEN



WIND TURBINES (ONSHORE)

#2

RANK BY 2050

84.6 GT

REDUCED CO2

\$1.23T

NET COST

\$7.43T

NET SAVINGS

WIND TURBINES (OFFSHORE)

#22

RANK BY 2050

14.1 GT

REDUCED CO2

\$572B

NET COST

\$274.6B

NET SAVINGS

ROOFTOP SOLAR

#10
RANK BY 2050

24.6 GT
REDUCED CO2

\$453B
NET COST

\$3.46T
NET SAVINGS

REDUCED FOOD WASTE

#3

RANK BY 2050

70.53 GT

REDUCED CO2



PLANT-RICH DIET

#4

RANK BY 2050

66.11 GT

REDUCED CO2

TROPICAL FOREST PROTECTION

#5

RANK BY 2050

61.23 GT

REDUCED CO2



EDUCATING GIRLS

#6

RANK BY 2050

59.60 GT

REDUCED CO2

MASS TRANSIT





IMPROVED RICE CULTIVATION

#24
RANK BY 2050

11.34 GT
REDUCED CO2

-
NET COST

\$519.1B
NET SAVINGS

WALKABLE CITIES

#54

RANK BY 2050

2.92 GT

REDUCED CO2

\$3.28B

NET SAVINGS

NET ZERO BUILDINGS



ELECTRIC BIKES





BIKE INFRASTRUCTURE



#59
RANK BY 2050

2.31 GT
REDUCED CO2

\$-2.0T
NET COST

\$400B
NET SAVINGS

BUILDING AUTOMATION



DISTRICT HEATING



SMART GRIDS



BUILDING RETROFIT



GREEN ROOFS

#73

RANK BY 2050

0.77 GT

REDUCED CO2

\$1.39B

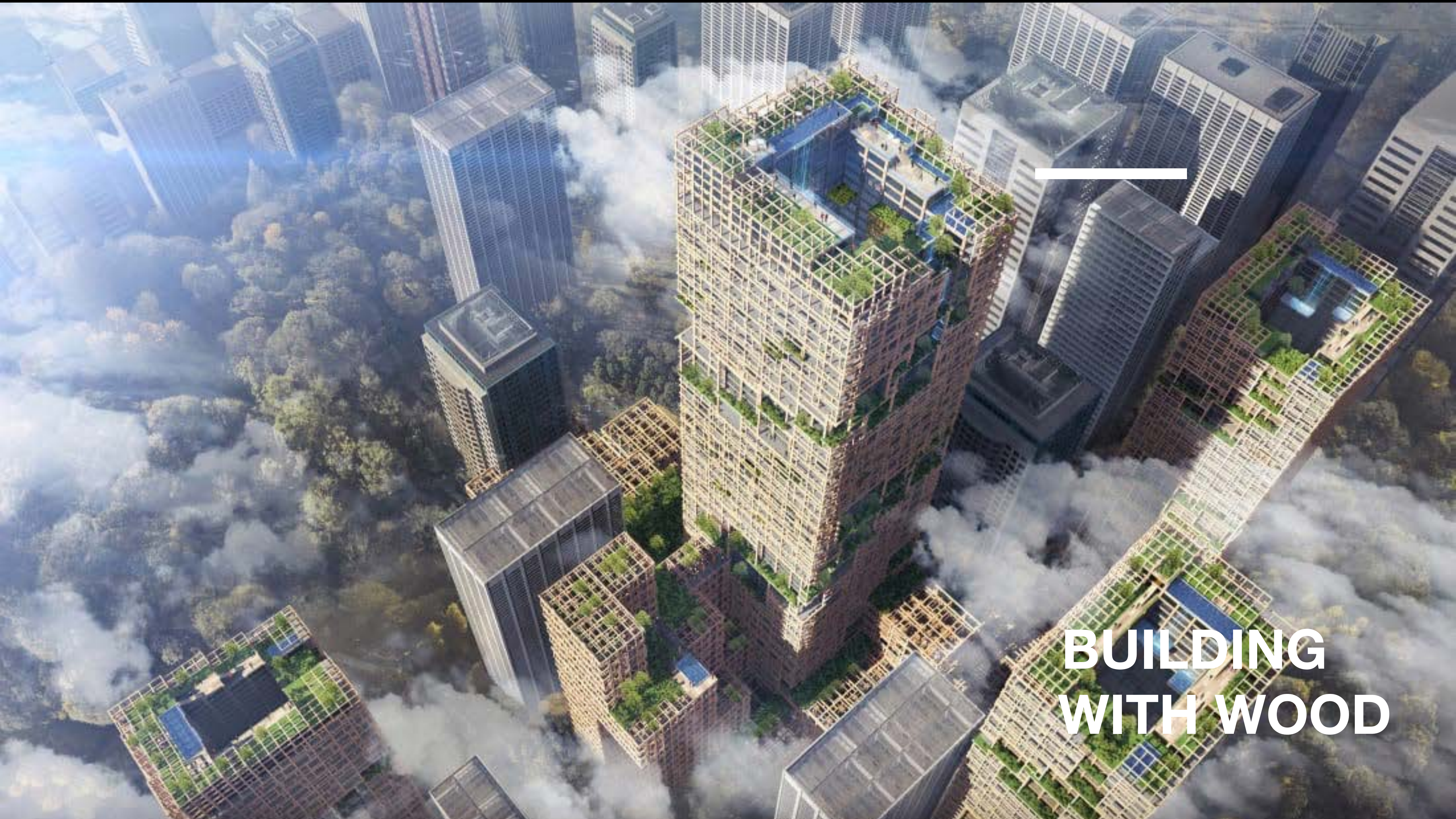
NET COST

\$988.4B

NET SAVINGS

BUILDING WITH WOOD





**BUILDING
WITH WOOD**



**CITIES LIKE
FORESTS**

TOP 20

Land Use is
12 of top 20

RANK	SOLUTION	SECTOR	REDUCED CO2
1	Refrigerant Management	Materials	89.74 GT
2	Wind Turbines (Onshore)	Energy	84.60 GT
3	Reduced Food Waste	Food	70.53 GT
4	Plant-Rich Diet	Food	66.11 GT
5	Tropical Proforestation	Land Use	61.23 GT
6	Educating Girls	Women and Girls	59.60 GT
7	Family Planning	Women and Girls	59.60 GT
8	Solar Farms	Energy	36.90 GT
9	Silvopasture	Food	31.19 GT
10	Rooftop Solar	Energy	24.60 GT
11	Regenerative Agriculture	Food	23.15 GT
12	Temperate Forest	Land Use	22.61 GT
13	Peatlands	Land Use	21.57 GT
14	Tropical Staple Tree Crops	Food	20.19 GT
15	Afforestation	Land Use	18.06 GT
16	Conservation Agriculture	Food	17.35 GT
17	Tree Intercropping	Food	17.20 GT
18	Geothermal	Energy	16.60 GT
19	Managed Grazing	Food	16.34 GT
20	Nuclear	Energy	16.09 GT

THE SEQUEL TO **NYT BESTSELLER** **DRAWDOWN**

REGENERATION
ENDING THE CLIMATE CRISIS
IN ONE GENERATION
EDITED BY PAUL HAWKEN



A wide-angle photograph of a vast, flat field of golden wheat stretching to the horizon. The sky is filled with large, dark, dramatic clouds, with a bright patch of light breaking through in the center. The overall mood is one of natural beauty and agricultural abundance.

One trillion tons

**REGENERATIVE
AGRICULTURE**



Seven hundred fifty billion tons

FORESTS



One trillion tons

OCEANS

CO² Math

REGEN	+ 1,000,000,000 tons		400,000,000 tons
FORESTS	+ 750,000,000 tons	X 40%	300,000,000 tons
<u>OCEANS</u>	+ <u>1,000,000,000 tons</u>		<u>400,000,000 tons</u>
<u>TOTAL</u>	<u>2,750,000,000 tons</u>		<u>1,100,000,000 tons</u>

416 ppm	3,300,000,000 tons	(total atmospheric CO ² today)
<u>280 ppm</u>	<u>2,200,000,000 tons</u>	
BALANCE	1,100,000,000 tons	

A FORCING
FUNCTION

MAKING
STARLIGHT
ON EARTH







