Exceed 2 degrees of warming

Troubled Future



Lack of knowledge



Signs of global warming are scarcely noticeable. People do not understand the complexity or scale of the problem. Huge quantities of greenhouse gasses like carbon dioxide are released into the atmosphere causing

the planet to steadily heat up.

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Islands disappear



Arctic ice melts due to global warming. The rising sea levels overwhelm a number of islands in the Pacific Ocean and families are forced to leave their homes. Islands in West Africa and the Atlantic in imminent danger.

Some islands lost forever.



Sea becomes more acidic



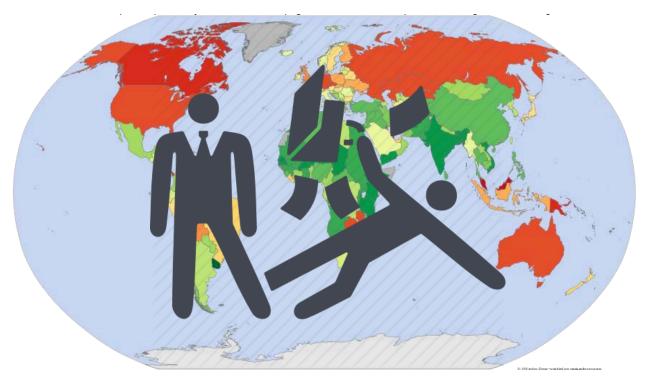
The world's oceans absorb millions of tons of extra atmospheric carbon dioxide creating carbonic acid. The resulting acidity bleaches coral and prevents the building of new skeletal material used by aquatic life.

Large amounts of coral-reef gone forever.

Cost of seafood rises as stocks deplete.



Climate targets collapse



Following US withdrawal from Paris Climate Agreement, Asian and European states follow suit.

Least polluting nations make up majority signatories.

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We all ignore the warnings



It's too hard, too awkward or too expensive to pay attention to what

the science is telling us.



Businesses do not change



The cost of change is deemed to be too high or too difficult.

Many businesses do nothing to review their carbon output.



Record number of flights



Globalisation is unstoppable and demand for air-travel sees exponential growth. New airports and runways are built across the world to meet the demand. Billions of tonnes of carbon dioxide are released into the atmosphere as a result.



Megacities boom



New megacities in previously 'developing' nations boom. Demand for energy exceeds investment in renewables and we see a return to fossil fuels for energy generation in these areas.



Counterfeit air-conditioning gasses escape



Demand for air conditioning continues to rise. Criminals maximise on the opportunity to supply unsafe, counterfeit equipment. Large volumes of refrigerant fluorinated gasses, thousands of times more powerful at trapping heat than CO2, are released into the atmosphere.



Deforestation removes carbon sink



Deforestation to grow crops reduces the planet's net ability to sequester millions of tonnes of CO2 per year.

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US passes legislation to protect business



The US passes legislation simultaneously protecting industry and consumer choice. Energy intensive products remain freely available.

Tax breaks for carbon reducing initiatives abolished.

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Resources dip



Fewer resources drive up prices.

Ordinary people become poorer.



Sea-freight companies fail to reduce carbon emissions.



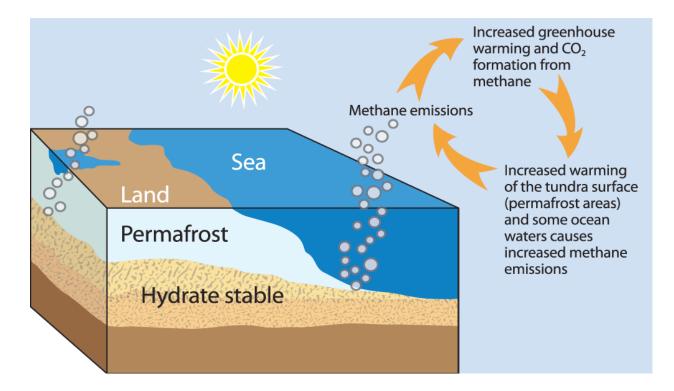
Following sanctions on the sea-freight industry, companies are forced to 'slow steam' in order to reduce carbon emissions.

Supply chains severely affected.

Tourism declines as prices rise.

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Arctic thawing releases methane



Warming temperatures cause large areas of arctic permafrost to melt. Large amounts of trapped are released and lead to sudden warming.



Living standards drop



Declines in standards of living are directly attributable to climate change. Previous range of products is no longer available.

The impacts are felt both in rich and less-wealthy countries alike.

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Flooding



Hundreds of thousands flee Buenos Aires following weeks of rain and crippling floods. Large-scale outbreaks of cholera overwhelm hospitals.

Drinking water infrastructure, homes and businesses decimated.

Recovery predicted to take at least a decade.



Insurance companies refuse homeowners

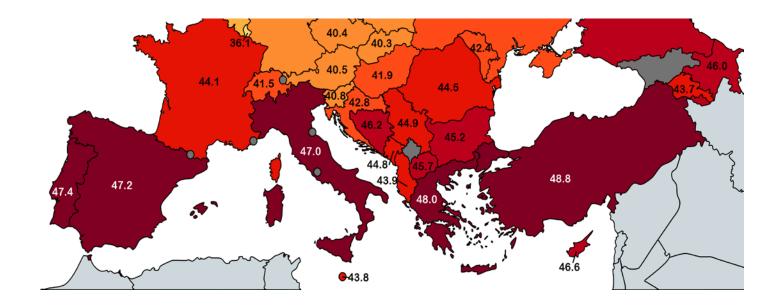


Thousands of Europeans move away from sources of water, unable to insure their homes against the impacts of climate change.

Many businesses close.

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Heat-waves destroy lives



Persistent heat-waves across Southern Europe claim many lives for four consecutive years. Following emergency talks, countries advise against travel to these areas.

Workforce depleted as people become ill.

Tourism sector in crisis.



Water Stress



With clean water in extreme shortage across much of Africa, Asia and the Middle East, extremist organisations conduct violent campaigns of terror as they seize control of remaining supplies.

Security severely impacts trade as

companies leave.



Black market for drinking water



Water scarcity in Mumbai and Delhi creates a lucrative black-market for counterfeit bottled water from unsafe sources.

Outbreaks of disease and violence.



Permafrost permanently lost



80% of permafrost gone forever. Glaciers shrink.

Ice melts causing global sea levels to rise.



Famine creates climate refugees



Mass food shortages in North Africa and the Middle East displace millions of people.



Costs skyrocket



Businesses that fail to act early to reduce carbon emissions incur big fines. It's too little too late and the worse the problem gets the more expensive it becomes to fix it.

Profits shrink.



Companies fold following climate scandals



A number of traditional companies fail to act and suffer catastrophic reputational risk.

Many close following divestment by shareholders.

Economies shrink as conditions become worse.



Impacted countries win compensation



Storms sweep across Madagascar, Mozambique and Malawi killing thousands. Governments from these countries win a landmark hearing that secures billions of dollars in compensation from developed nations, ruled to be the *'unequivocal proponents of exponential climate change due to the historic negligent release of greenhouse gasses...'*



War



Poverty, famine, drought and mass political destabilization displaces millions. Nations go to war. Many die.



50% of the world's biodiversity dies



More than half the world's species of plants and animals become extinct.



Stay below 2 degrees of warming

Positive Future



People act



Individuals, families, communities, governments decide to act, together, against catastrophic climate change.



Education



Companies, schools, universities and public institutions commit to carbon literacy training for all.



Innovation



As business leaders call on their workforce to help them become sustainable, every element of their ethos and process is examined. The result is a 40% uplift in innovation. Brand value increases as consumers enjoy the benefits. Share price increases.



Dietary overhaul



Historic reduction in meat consumption. Vegetarian and vegan diets widely adopted. Meat alternatives become the major, not the minor.

Meat is seen as a premium product.

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Telepresence



Increasingly, workers are able to reduce their carbon footprint by working remotely. Disparate teams communicate electronically.

Companies soon realise the cost savings.

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Efficiencies



Old, inefficient equipment and practices are replaced through managed upgrade programmes. Payback time on capital expenditure shrinks. Companies reinvest cost savings and simultaneously realise a net reduction in carbon.

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Political cooperation



All nations sign or re-enter the Paris Climate Agreement. There is an international commitment to limit global warming to within 1.5-2 degrees Celsius of pre-industrial levels.



Women become more educated

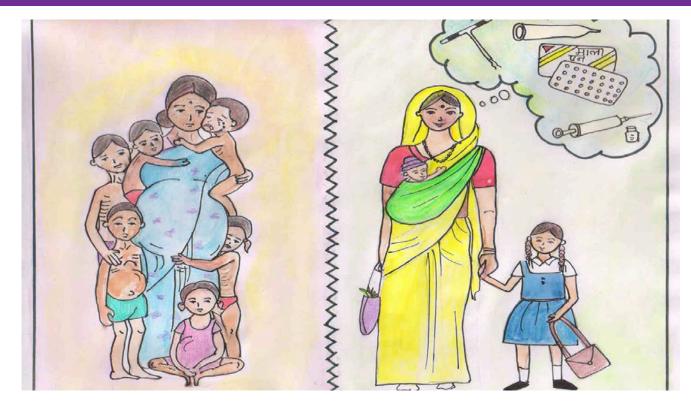


Equity of education and opportunity for women sees millions of women become smallholders. Productivity increases.

Land is used better and results in a net carbon saving of millions of tonnes.

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Family planning



Localised programmes of education enable better family planning for men and women across the world. Disease and poverty are reduced.



Afforestation



Millions of trees are planted all over the world. These forests will grow and remove huge quantities of carbon dioxide from the atmosphere.

Deforestation of the Amazon is severely restricted.



Micro-generation of renewables



Governments incentivise citizens and communities to run micro-generation projects for renewable energy.

Households and schools generate more electricity than they need and export the excess at a profit.



Recycling reduces methane from landfill



Wealthy countries approve strict laws requiring their citizens to recycle their waste. Innovative systems for recycling of organic and inorganic matter are embedded into the supply chain in poorer countries.

Vast quantities of heat-trapping methane is prevented in landfill.

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Intermediate solutions help decarbonize.



The development of intermediate solutions to move from fossil fuels to renewable energy are accelerated.

Biofuels and energy-recovery systems proliferate.

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High speed rail viable alternative to flying

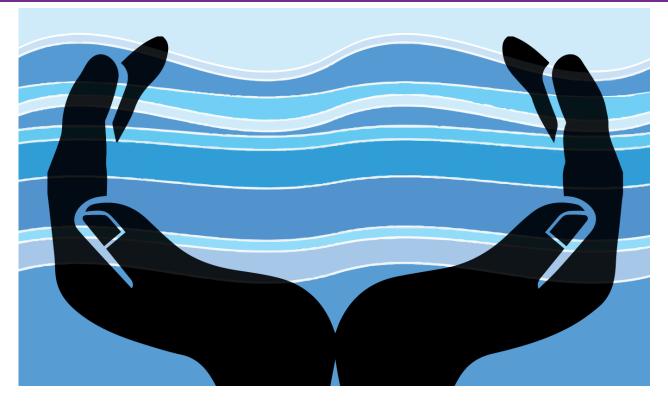


Countries invest in high-speed rail networks.

Journeys by train are significantly cheaper than the equivalent journey by air.



Water Efficiencies



Education combines with innovation to manage water much more effectively in homes and industry.

Water and carbon are saved on unprecedented scales.

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Fashion overhaul



Alternatives to cotton and synthetic materials save water, and carbon. New technologies allow the user to alter the colour and design of garments. Fabrics last longer.

Disposable fashion is rejected.



Land use improves



Education and practise of silvopasture increases.

Efficient use of land creates larger yields and cost savings.

Knowledge is passed on.



Carbon Capture



Technologies are developed to assist in localised reductions of atmospheric carbon. They are paid for by the most polluting industries.

Jobs are created as companies innovate.

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Behaviours embedded



Carbon literacy training is a standard part of every education system. Lifestyle habits and behaviours are routinely efficient in terms of energy and water use, recycling and waste disposal. People no longer think about their decisions and look back with disbelief at how we used to live.

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Electric cars are ubiquitous



Infrastructure and ownership of electric vehicles are commonplace across Europe, America and large parts of Asia. The batteries of electric vehicles provide a distributed storage network for balancing renewable energy supply and demand.



Smart grids, building management



Energy is managed holistically and intelligent technology integrates with bigdata to distribute resources efficiently.

Financial and carbon savings are realised immediately.

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Standards of living improve



Through better management of resources, countries enjoy economic prosperity on all continents

People live more comfortably.

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Accountability



Seven politicians and a number of senior business leaders from six states are extradited and found guilty of conspiracy to commit ecocide.

Jail sentences range from 4-22 years.



Nitrogen fixing for wheat crops

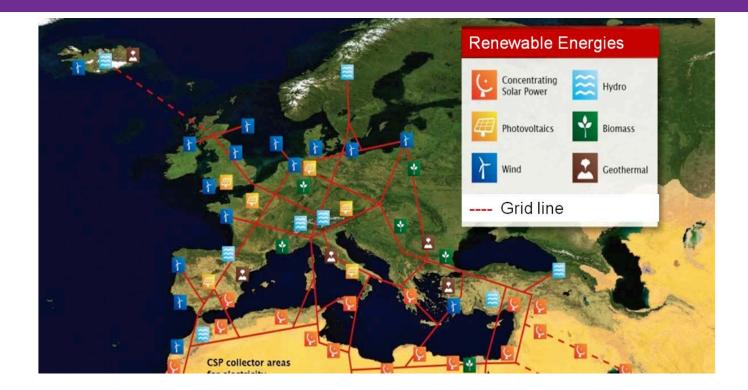


A genetic solution is discovered to eliminate the need to artificially fertilise wheat crops. Millions of tonnes of carbon are saved as fertilizer production is vastly reduced.

The inventor wins a Nobel prize.



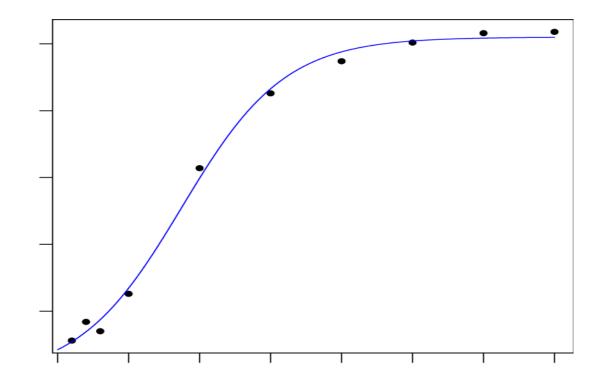
European renewables super-grid



Continents pool their diverse energy resources into a renewables super-grid, creating energy independence and a long-term commitment to carbon reduction.



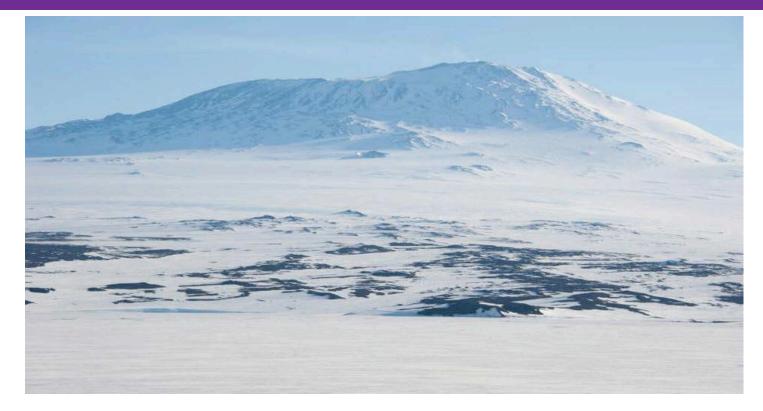
Population increase stabilizes



Despite extended life-expectancy, global population growth plateaus at 9.2 billion.



Carbon dioxide concentrations reduce



Humans succeed in their efforts to reduce carbon emissions.

Carbon dioxide concentrations reduce to 350 ppm.

Global warming is kept well below 2 degrees Celsius.

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