

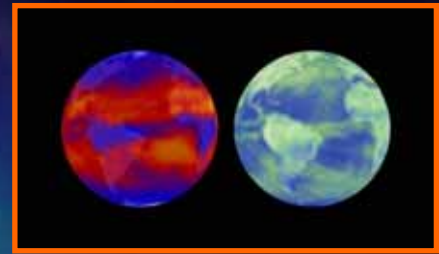


Creating the Climate for Change Communities doing it for themselves



Richard Davies
Chief Executive
Marches Energy Agency

Marches Energy Agency?



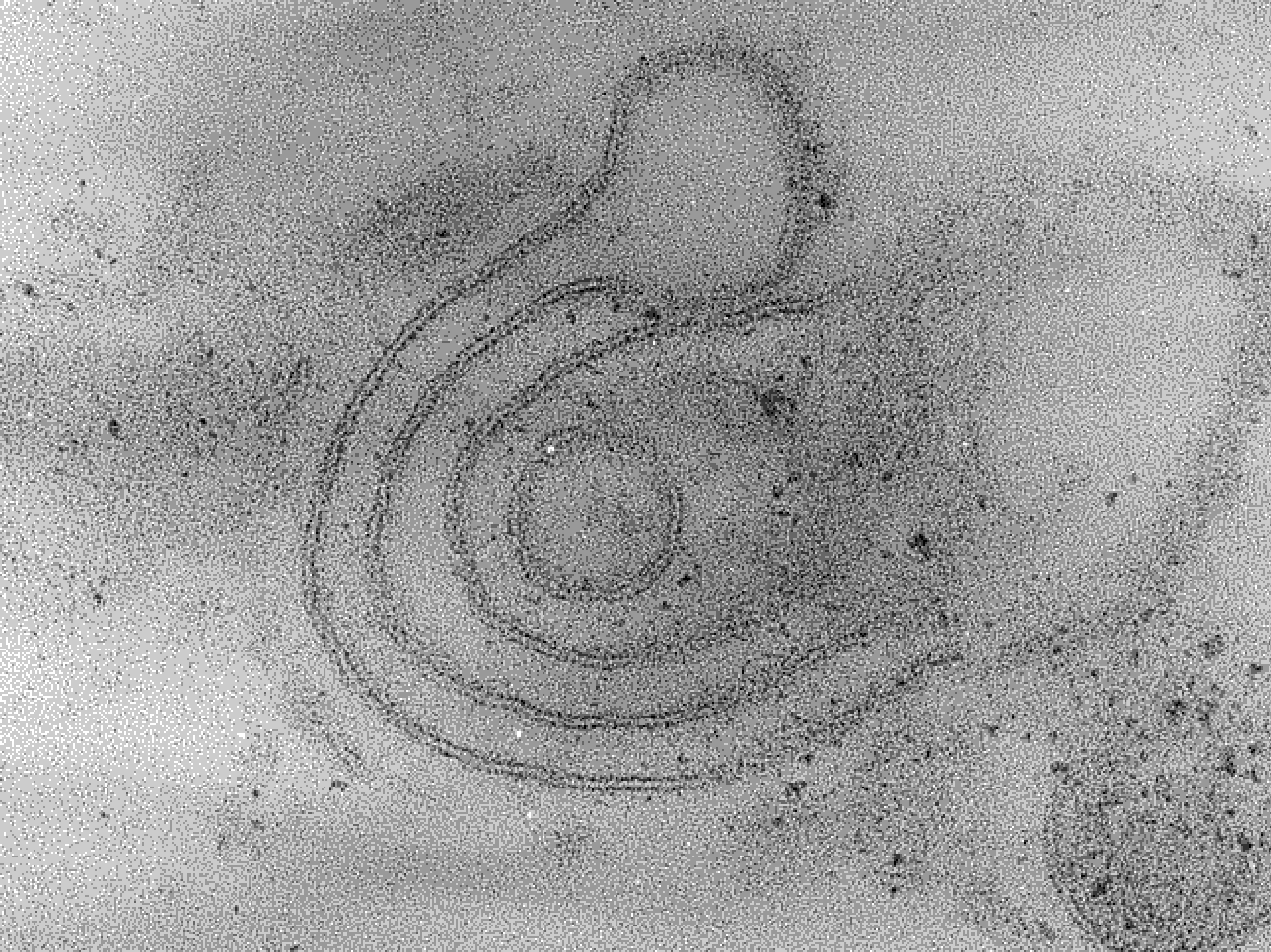
- Sustainable Energy Charity based in Shrewsbury – ‘creating the climate for change’
- Delivering a programme of activities to:
 - promote sustainable energy
 - addressing climate change
 - promoting energy efficiency & the generation of appropriate renewable energy
 - promoting clean/renewably fuelled vehicles
 - **are you doing your bit?** challenging & inspiring individuals, organisations and businesses



Planet Earth

Imagine that
the 4.6
billion
year age of
planet
earth is
represented
by a
single
year.....





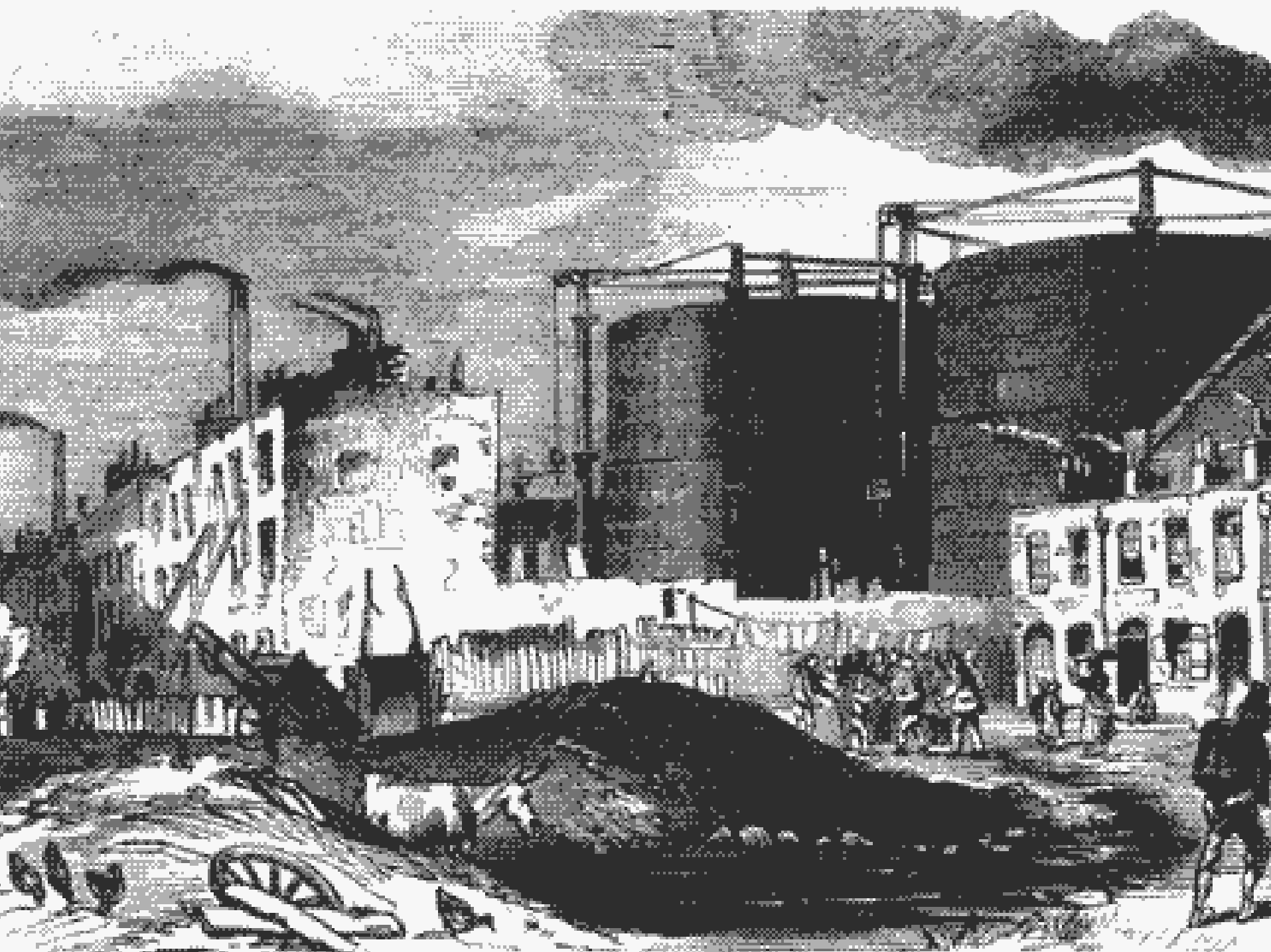








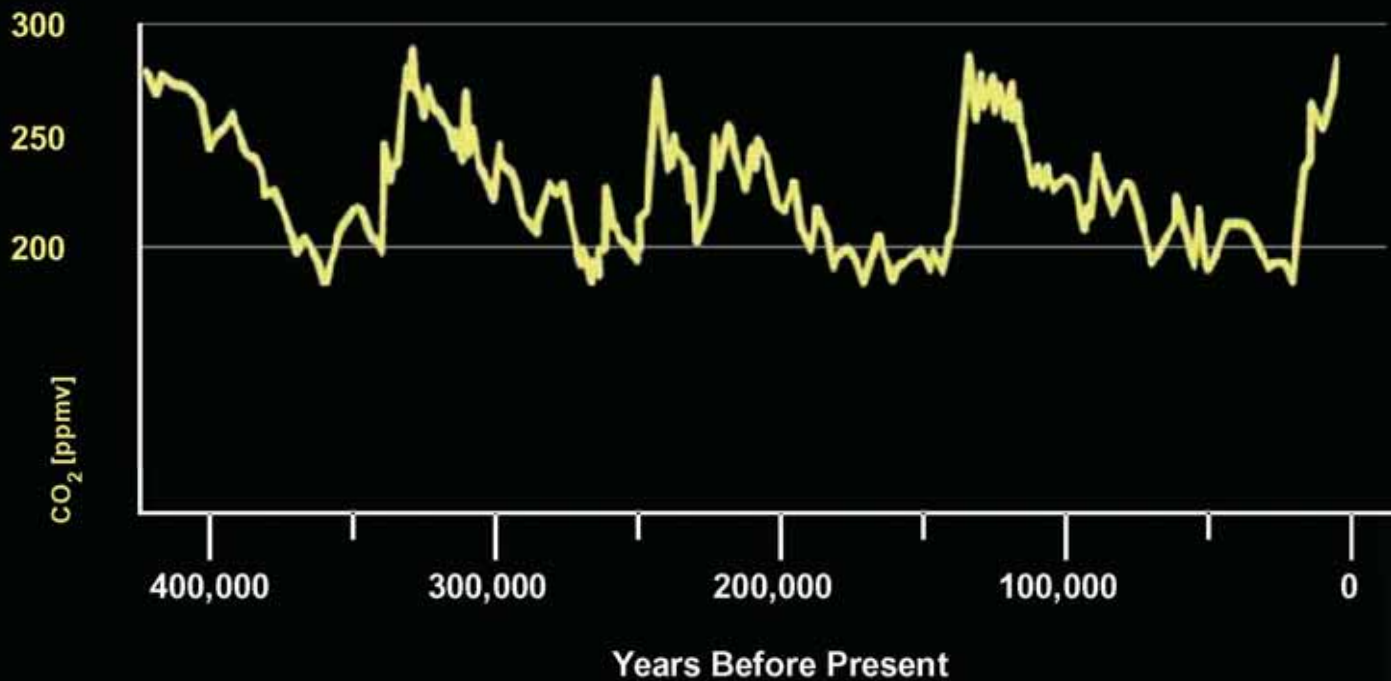




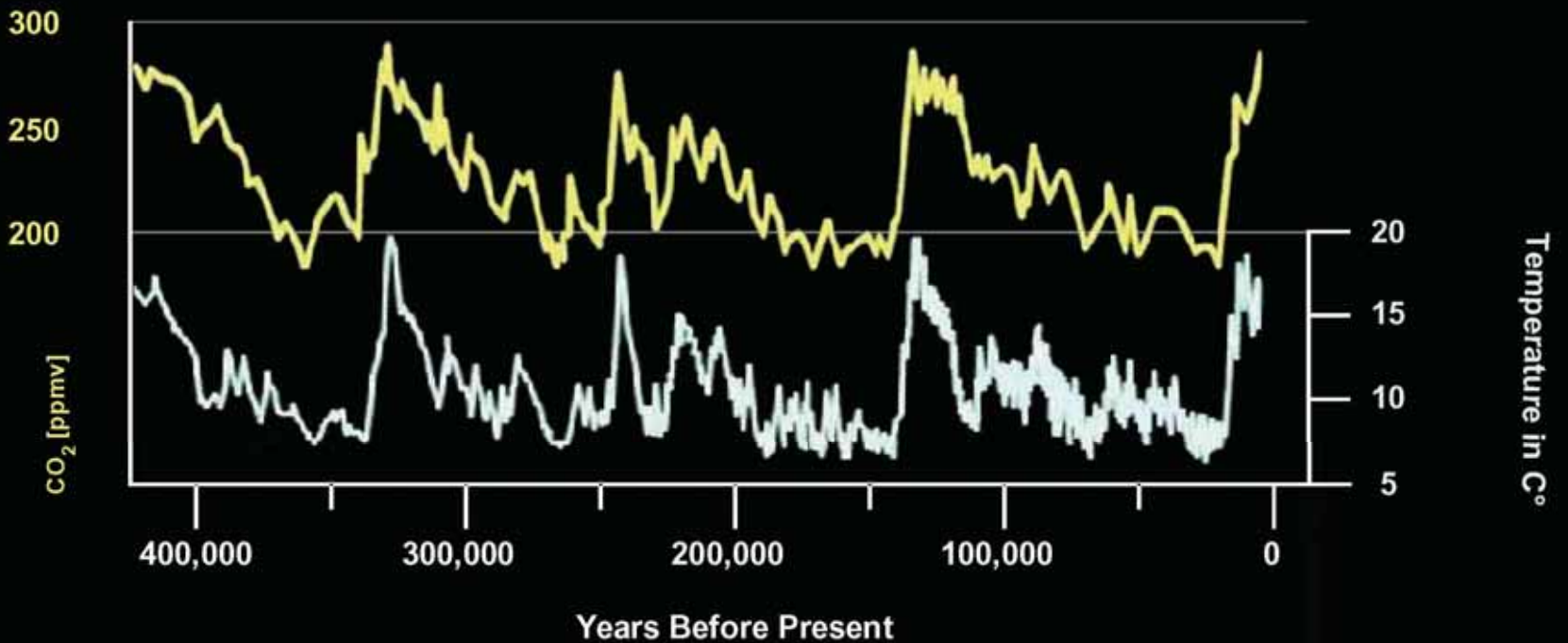


CO₂ Concentration

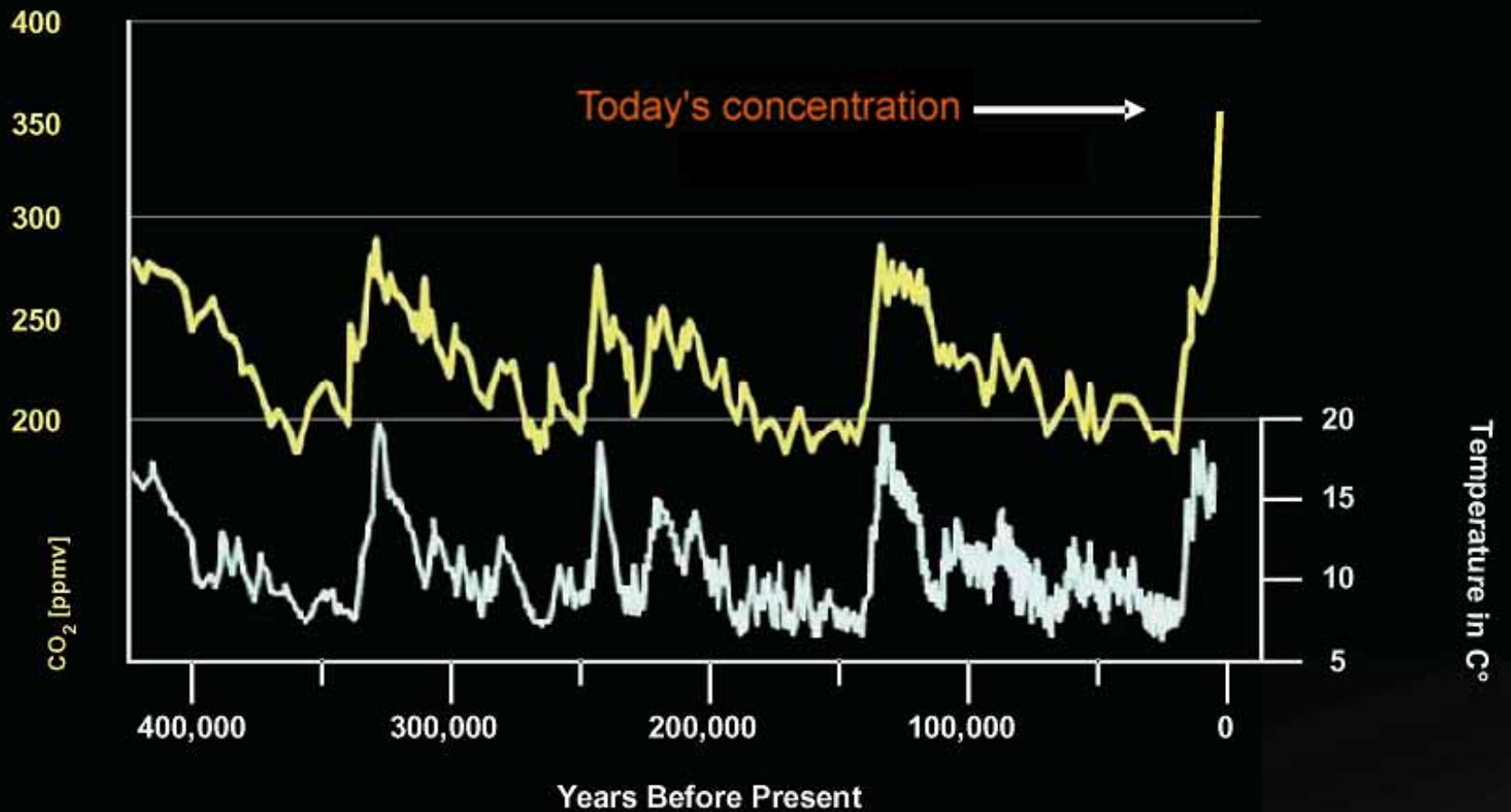
[ppmv]

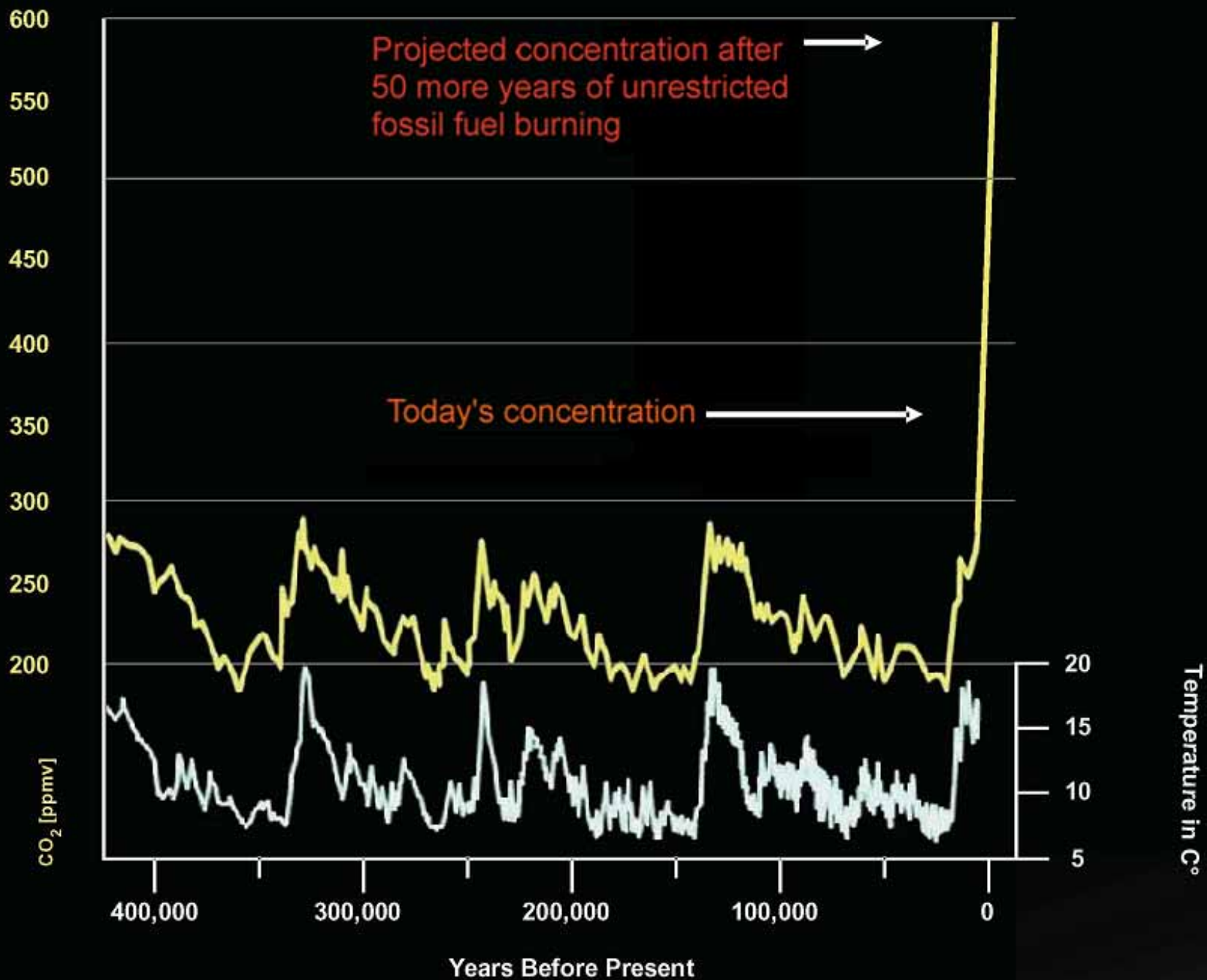


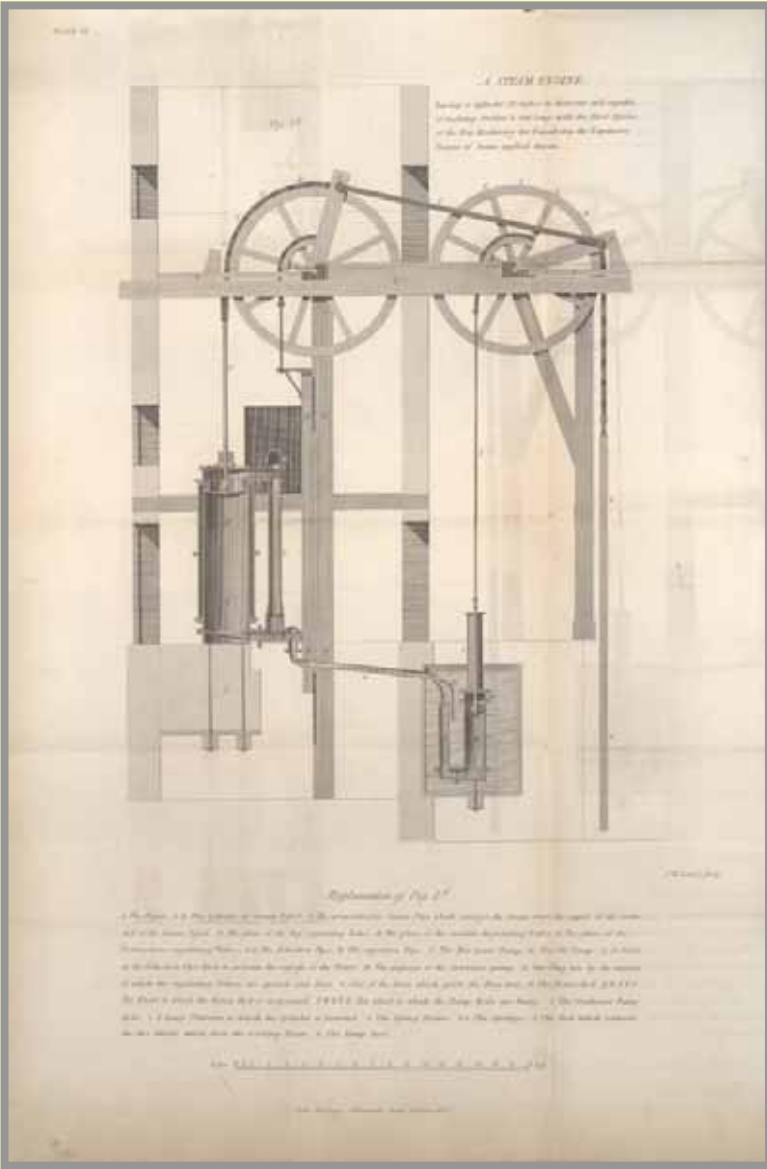
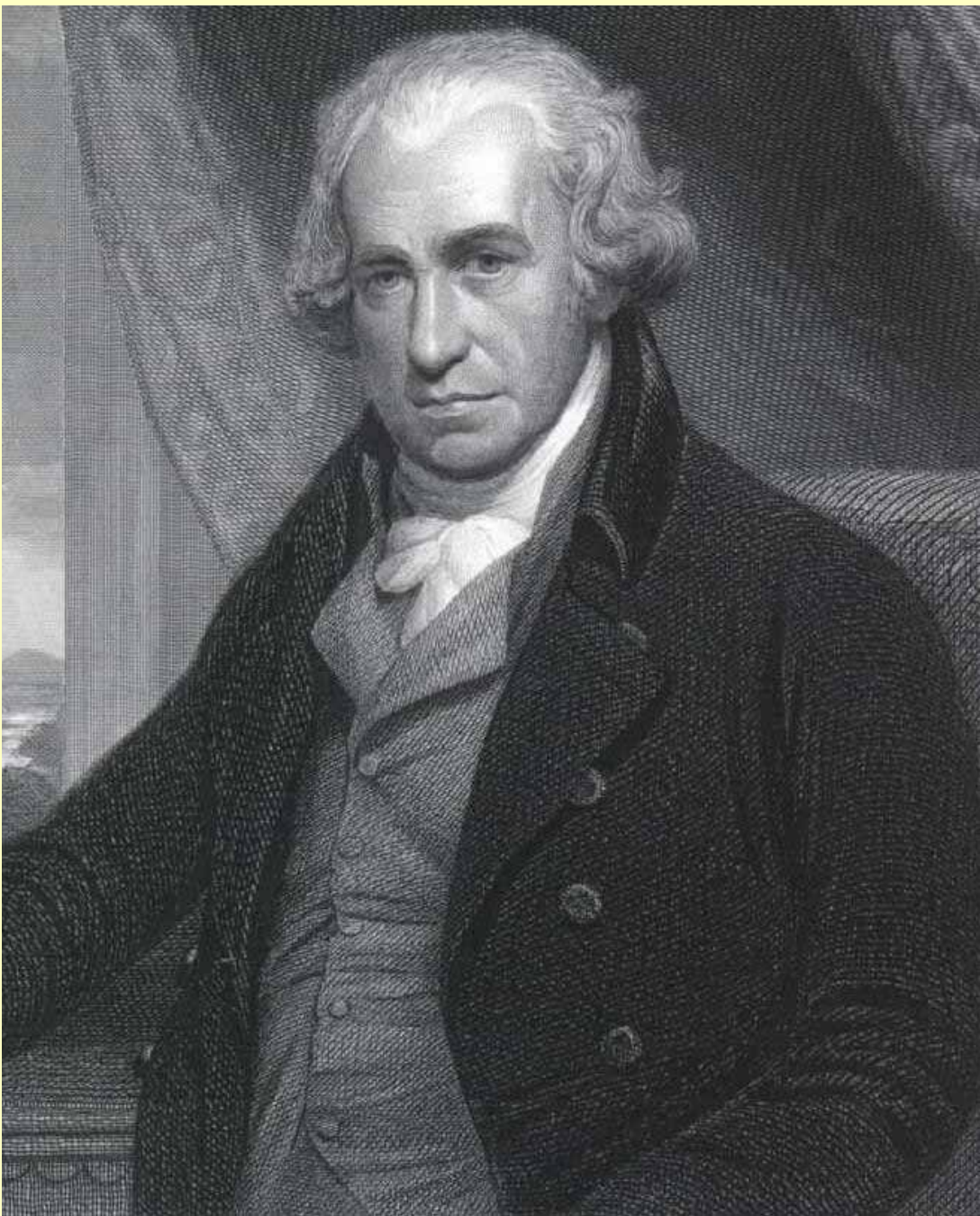
CO₂ and Temperature



CO₂ and Temperature







280ppm



315ppm



S.S. DE GRASSE

330ppm



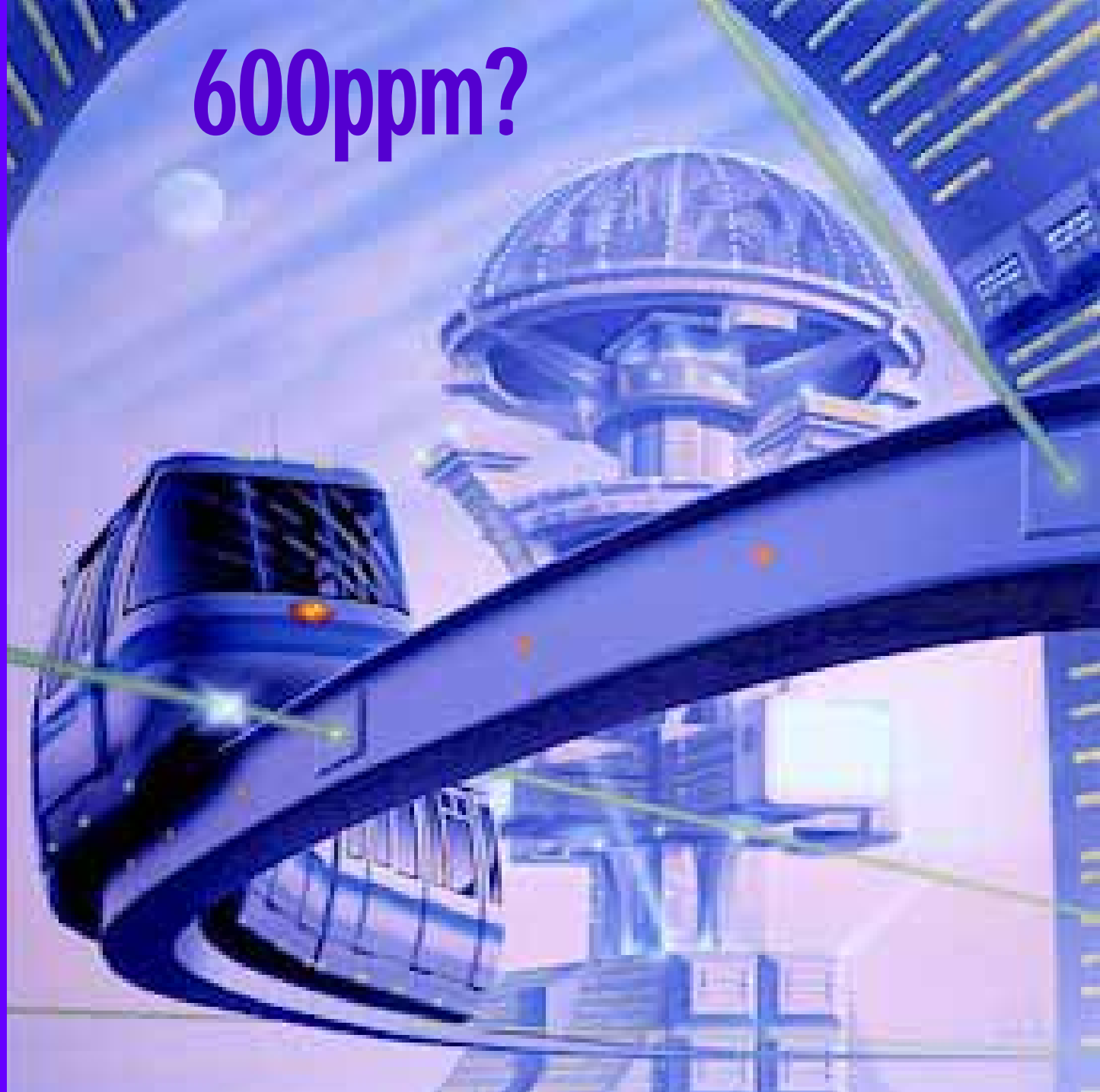
360ppm

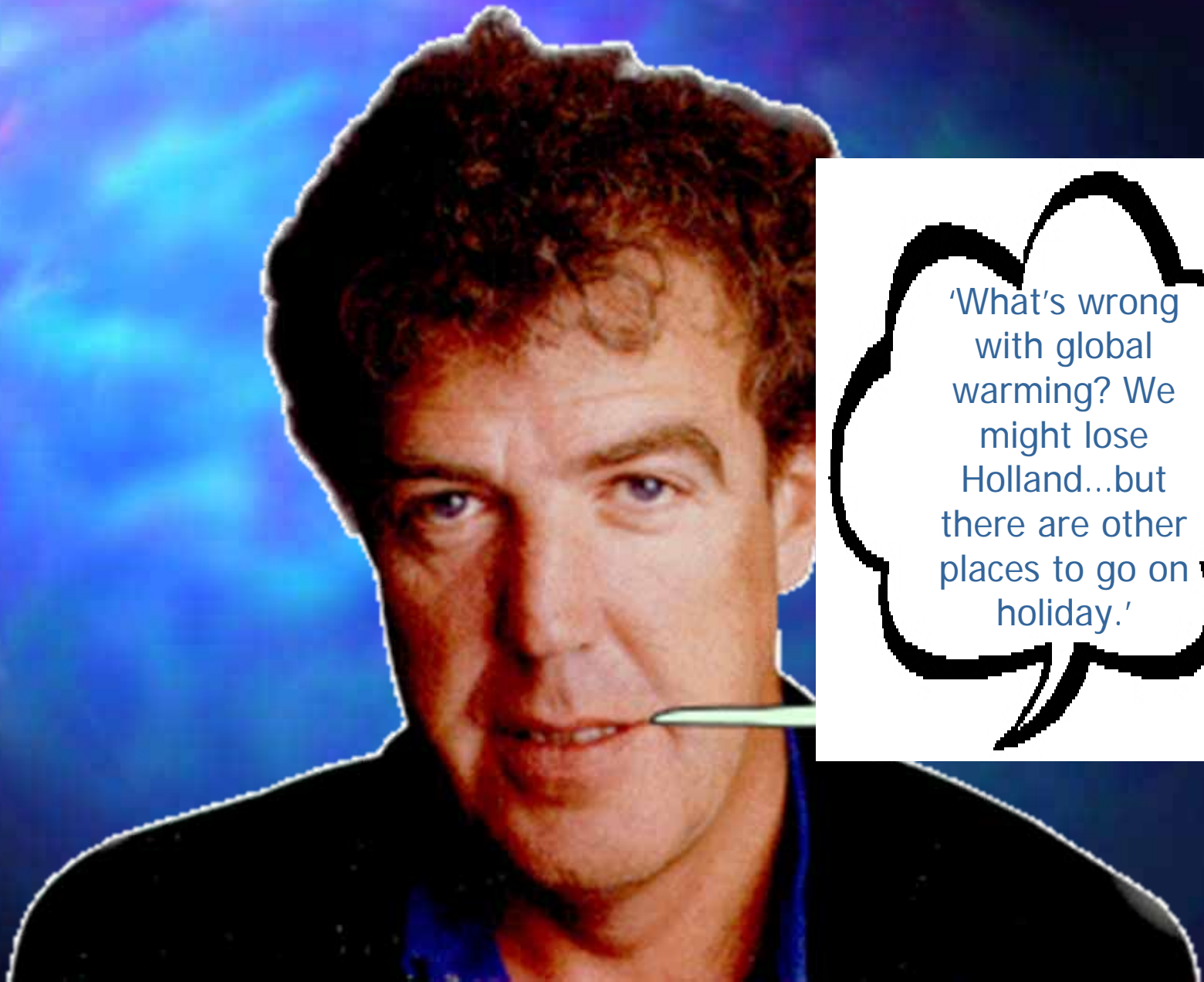


380ppm



600ppm?





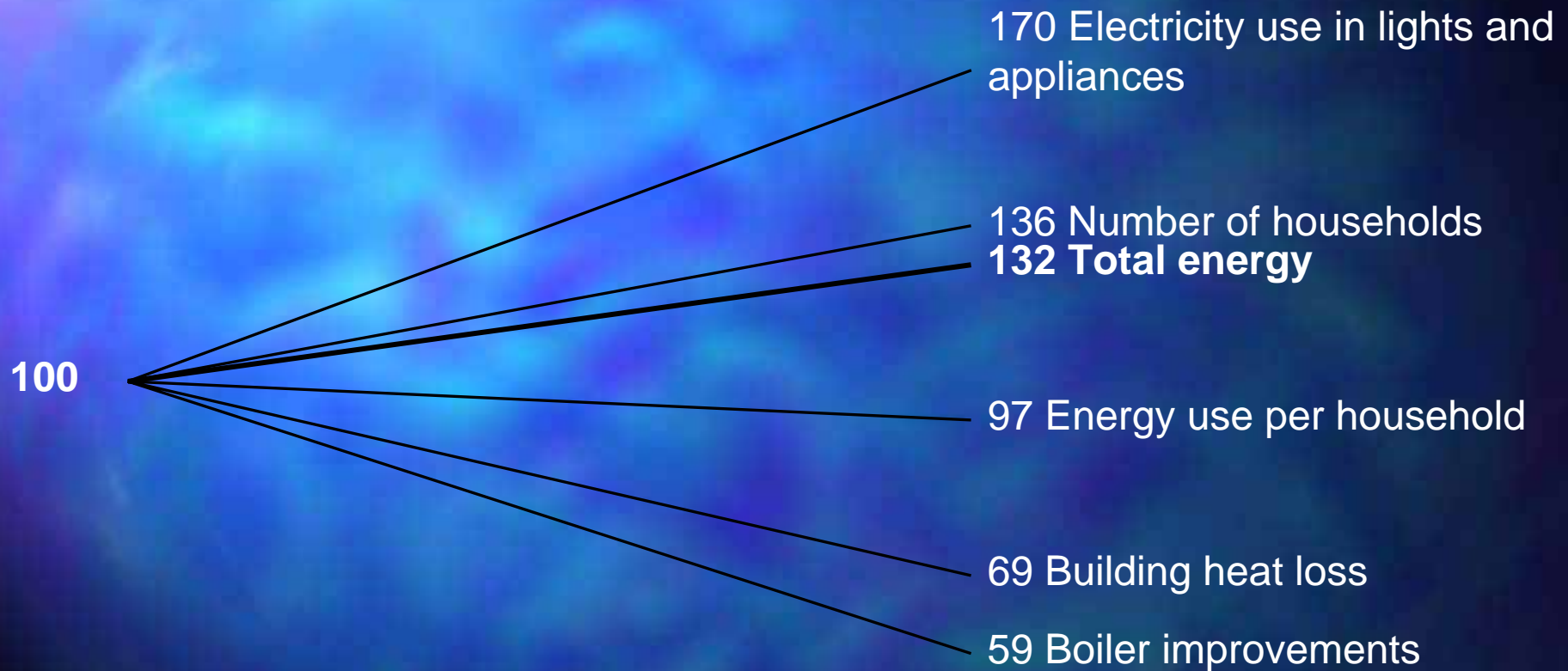
'What's wrong with global warming? We might lose Holland...but there are other places to go on holiday.'

A black and white photograph of a hand holding a single puzzle piece. The puzzle piece is white and has a complex, irregular shape with several holes and protrusions. The hand is positioned in the upper left quadrant of the frame, with the fingers gently gripping the piece. The background is dark and out of focus, suggesting a larger puzzle is being assembled.

The bits of the jigsaw?

- Not using energy
- Using energy more efficiently
- Using energy from renewable sources
- Generating the remainder in a less damaging way

Energy Trends 1970-2001



How to spend less than a tenner and make savings of thousands!



Step 1 - Buy 1 Low Energy Light Bulb



Buy 1 low energy light bulb (20W) to replace one standard bulb (100W) at a cost of between £3 and £7.50. This will give a life time saving in electricity of around £98. It also saves around £4 in not replacing standard bulbs every few months—a low energy bulb lasts up to 15 times longer than a standard bulb.

Total saving: £100

Step 2 - Buy 13 or more Low Energy Light Bulbs

Invest your £100 saving in 13 or more low energy light bulbs, targeting high wattage and frequently used bulbs first.

Total saving: £1300



Step 3 - Insulate, Insulate, Insulate!

Invest your £1300 saving in loft insulation, cavity wall insulation, draught proofing, hot water pipe insulation and hot water tank insulation. This could cost up to £1000, but likely to be lower, especially if you are eligible for certain grants. Together, these measures will save you around £200 per year on your heating bills. Over 20 years this will save you £4000.



Total saving: £4000

Step 4 - Invest in an 'A' rated Boiler



Invest your £4000 saving in an 'A' rate boiler with modern heating controls, or even a new Micro Combined Heat and Power Unit (Micro CHP) which will generate electricity as well as heat. Doing this would cost up to £3500 and would save up to £2500 over a 15 year lifespan.



Total saving: £2500

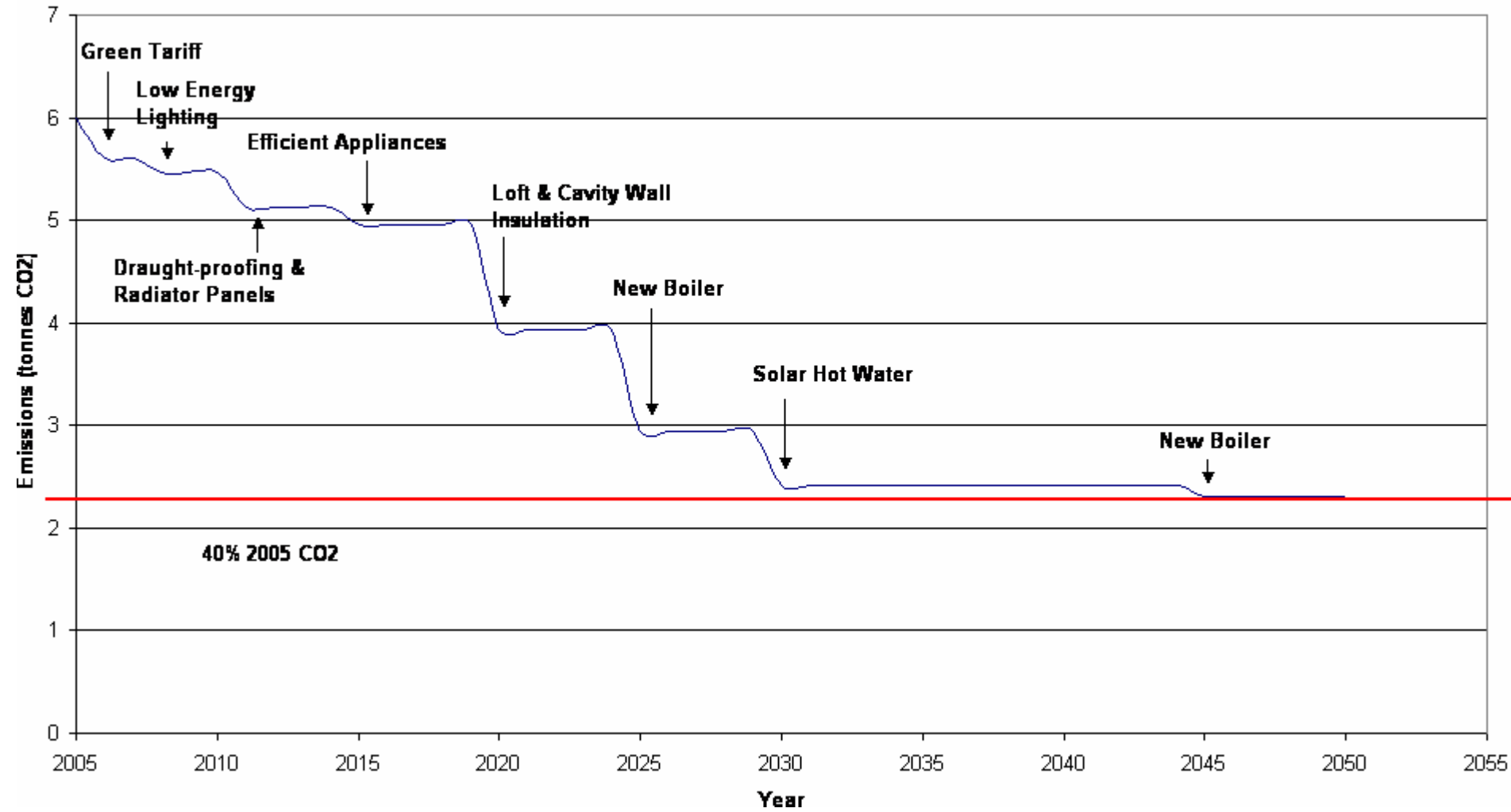
Step 5 - Generate your own hot air!

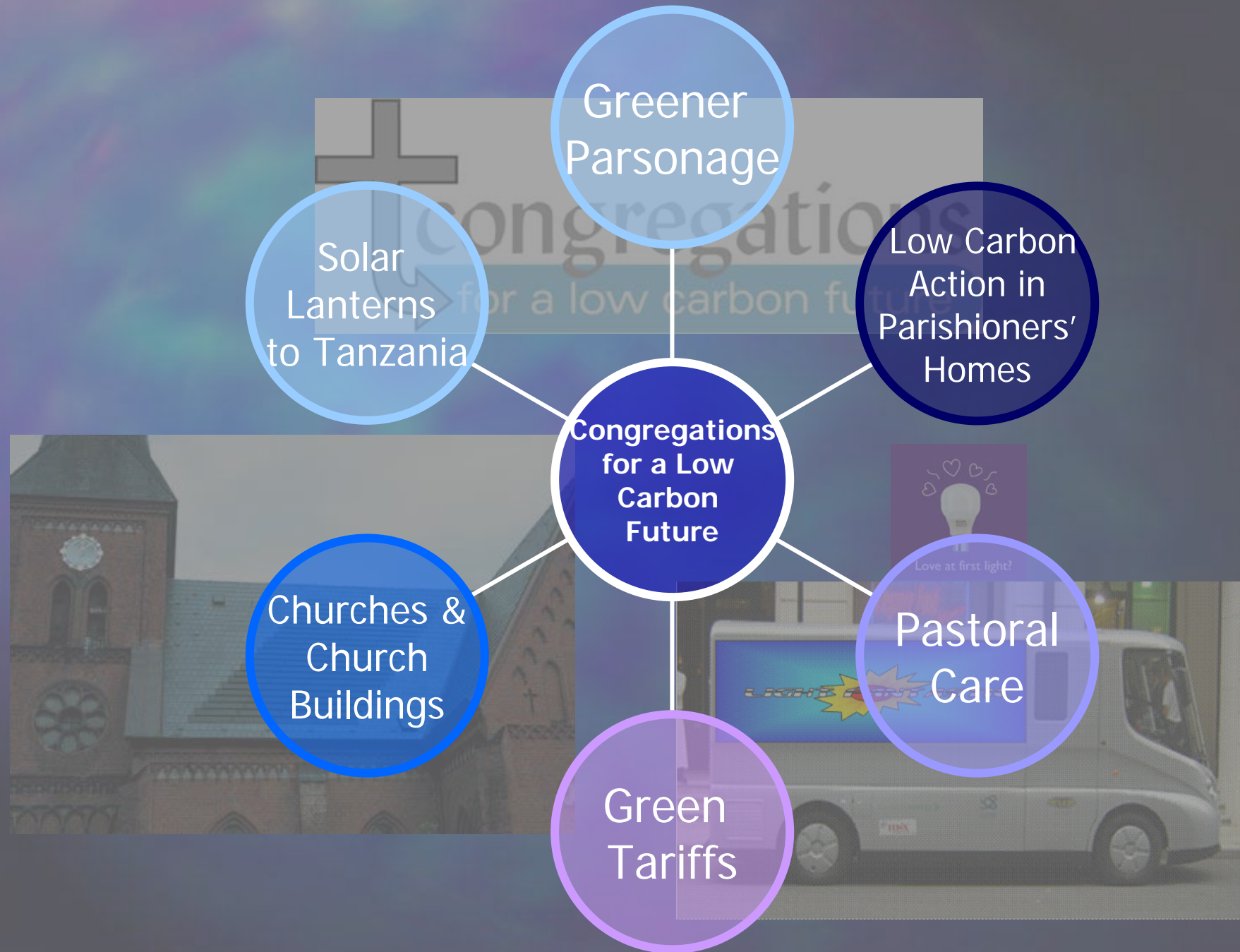
Take advantage of Government grants and invest in renewable energy generation technology for you own home. You could generate electricity from wind and sun, heat from the ground or wood and hot water from the sun or wood pellet boilers.

Total saving: Free heating and electricity!

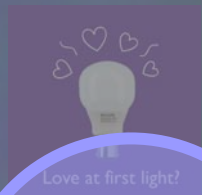


The 40% Parsonage





Congregations for a low carbon future



Love at first light?



Microsoft Excel - Blackpool Hilton

File Edit View Insert Format Tools Data Window Help Adobe PDF

Type a question for help

C43 fx

	B	C	D	E	F	G	H	I	J	K	L	M	N
1													
2													
3	Low Energy Lightbulb Payback Times		Hilton Hotel Blackpool										
4													
5													
6	Incandescents (W)	Number	Total (W)	Type	CFL (W)	Number	Total (W)	CFL Cost/Bulb	CFL Lifetime/hours	Lifetime Saving/£	Avoided Bulb Costs		
7		40	392	15680		9	392	3528	£5.00	15,000	£10,936.80	£2,058.00	
8						392					£10,936.80	£2,058.00	
9	Total Incandescent Wattage		15680		CFL Wattage	3528							
10													
11	Typical Hrs Used/Day Mon-Sat (winter)			8	Initial Investment		£ 1,960.00						
12	Typical Hrs Used/Day Mon-Sat (Summer)			8									
13	Typical Hrs Used/Day Sunday (Summer)			8									
14	Typical Hrs Used/Day Sunday (Winter)			8									
15	Ave Hrs Used Per Day			8.0									
16	Weeks open per year			52									
17													
18		Incandescent		CFL		kWh saved/gear	35,387						
19	kWh Per Day	125.44		28.22		kg CO2 saved/gear	15,216						
20						Lifetime Carbon Dioxide Saving	78,380	kg CO2					
21	Price/kWh (p)	6		6									
22	Cost per Day	£ 7.53		£ 1.69									
23	Cost Per Year	£ 2,739.61		£ 616.41									
24													
25	Est. saving per gear			£ 2,123.20									
26													







24 January 2006 : News Release

[Home](#)

About

[Philip Dunne](#)

[Ludlow](#)

In Parliament

[Speeches](#)

[Debate](#)

[Questions](#)

[Early Day Motions](#)

[All-Party Groups](#)

[Work and Pensions](#)

[Select Committee](#)

[Standing Committee](#)

[Plant Breeders'](#)

[Rights](#)

In Constituency

[Articles](#)

[Press](#)

[Newsletters](#)

[Surgeries](#)

[Photos](#)

[Useful Links](#)

MP Dunne launches UK's first 100% biodiesel forecourt pump

Local MP Philip Dunne was honoured last week to open the UK's first 100% biodiesel for sale to the public from a garage forecourt at the Union Street Garage in Bishop's Castle. The biodiesel is made from waste rapeseed oil collected by Intelligent Energy Services from South Shropshire schools, where it has been used for cooking.

The town's pioneering environmental campaign group The Wasteless Society acted as catalyst by installing the tank at the garage and encouraging the garage to take on the sale of the product to the public.

Philip Dunne MP carried out the formal opening along with the mayor of Bishop's Castle, Cllr Jane Carroll.

Mr Dunne said: "This is a very exciting development, showing Shropshire Marches at the forefront of environmental progress. With oil prices at such high levels, biodiesel is becoming economically viable, for retailers, processors and consumers. It has the added benefit of potentially providing hard-pressed farmers with an alternative crop to help maintain their livelihoods. I would encourage all those who drive diesel powered vehicles in the Bishop's Castle area to consider gradually switching over to this fuel."



Philip Dunne at the
Union Street
Garage in Bishop's
Castle.

Bishop's Castle Carbon Footprint

The footprint for Bishop's Castle – 1,000 homes,
2,500 people

- The community emits over 22,226 tonnes CO₂ per annum
- Household emissions alone are 7,151 tonnes CO₂ pa
- Households stand **40%** above the national average
- 20.8 tonnes for each household
- 9.1 tonnes for each person



Community Voting Card

Waste Less Energy: Towards a Climate Change Strategy for Bishop's Castle

Your views are important to us. Please complete this Voting Card clearly. Before completing it please see notes at bottom.

Did you find the presentation on carbon dioxide emission reductions?
Tick **one** box as appropriate.

- very informative
- informative
- not very informative
- not at all informative
- I was not present

Tick only **one** box below to say which option on carbon dioxide emission reductions you would like Bishop's Castle to aim for as a community.

Do nothing until we're made to by politicians through law and regulation.

Start work now so we can reach the recommended 60% reduction by 2050.

Start work now so we can reach the recommended target of a 60% reduction earlier.

The target date should be:

- by 2030
- by 2035
- by 2040

Start work now so we can reach the recommended target of over 60% reduction by 2050.

Target reduction should be:

- 70%
- 80%
- 90%
- 100% - carbon neutral

Note: If you would like more information about CO₂ emissions and Climate Change before deciding on your answers, try the Waste Less Energy website at www.wasteless.co.uk, the Marches Energy Agency website at www.mea.org.uk, or pick up our leaflet at the Library in Bishop's Castle.

Please hand in or return directly to:
David Palliser, 33 Welsh Street, Bishop's Castle, SY9 5BS.

The packages within the plan

1. Energy Efficiency
2. Small Scale Renewables
3. Transport
4. Food
5. Material Resources
6. Community Scale Renewables





The Action Plan Jigsaw



Liquid Solar Fuel

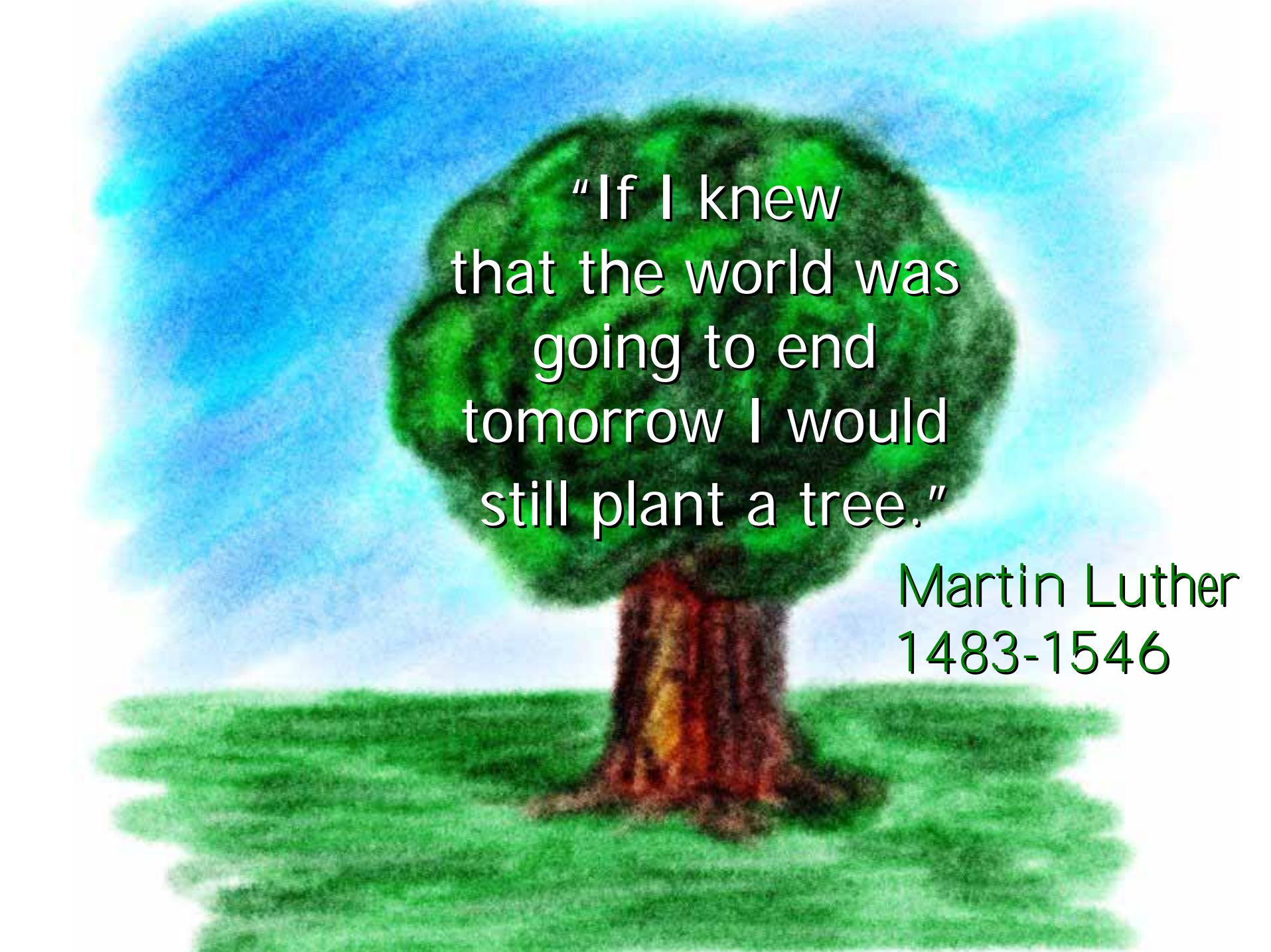


Mostly we know what to do but we lack the will to do it.

Sir Crispin Tickell

Nobody made a greater mistake than to do nothing because he could only do a little.

Edmund Burke



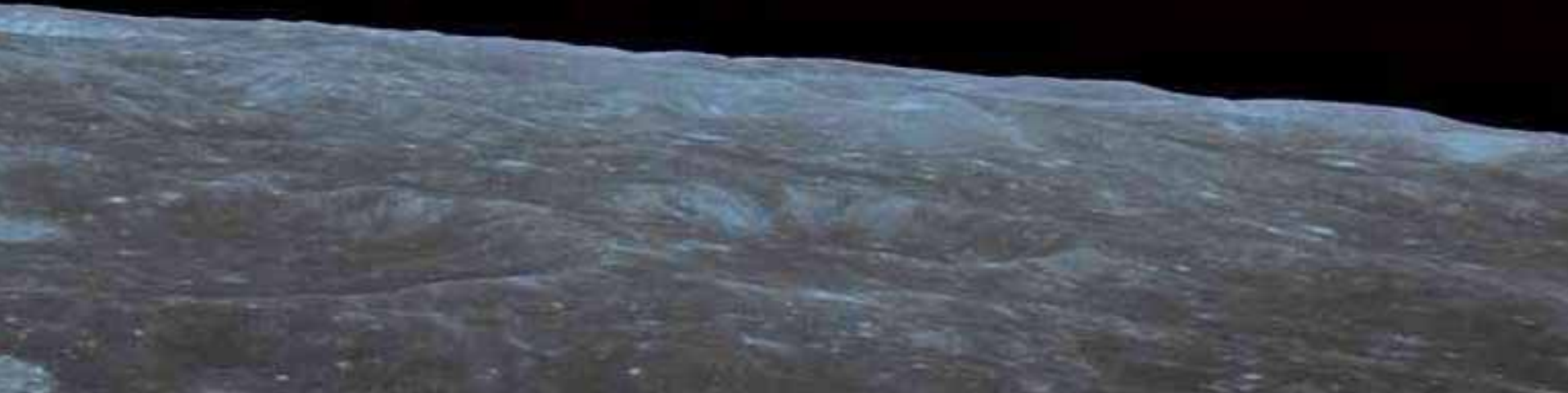
"If I knew
that the world was
going to end
tomorrow I would
still plant a tree."

Martin Luther
1483-1546



"Tell me,
what is it you plan to do
with your one wild and precious life?"

Mary Oliver, *The Summer Day*





Don't just stand there, do something!

Thank you

Marches Energy Agency
23 Swan Hill
Shrewsbury
SY1 1NN
01743 246 007



www.mea.org.uk