

climate event, said: “We live in a disposable society and the reality is that people wear a fast fashion piece an average of 3 times before it is thrown away. We need to educate so that people are more mindful of the impact of their clothes...We need to work with policymakers to create measures that incentivise change because, right now, the fashion industry is getting away with murder.” In responding, the chairman of C&A argued that the onus is now on high-street brands to develop sustainable products at a price parity with traditional fast fashion garments, and if necessary, to pay more to do so.”

#### Thursday 31<sup>st</sup> January

From 6.30 to 8.30 tomorrow at the URC church at 1 Mount Ephraim, Churches Together in Tunbridge Wells are hosting a public meeting on “Faith, Hope & Action in a Changing Climate”. Speakers include Greg Clark MP, the Business and Energy Secretary, and Dr Ruth Valerio from Tearfund. To find out more and to book a free ticket, go to:

<https://www.eventbrite.co.uk/e/faith-hope-and-action-in-a-changing-climate-an-evening-with-greg-clark-mp-and-dr-ruth-valerio-tickets-49984054653> .

#### Sources:

[www.BusinessGreen.com](http://www.BusinessGreen.com)  
[www.edie.net](http://www.edie.net)

If you would like to receive the prayer diary each month by email (free), please email: [prayer-guide@greenchristian.org.uk](mailto:prayer-guide@greenchristian.org.uk)

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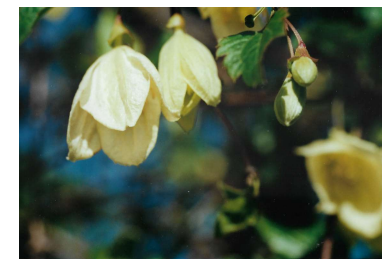
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Picture on front cover: Clematis cirrhosa,  
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## Prayer guide for the care of creation



# January 2019

“Take the helmet of salvation and the sword of the Spirit, which is the Word of God, and pray in the Spirit on all occasions, with all kinds of prayers and requests.” (Ephesians 6.17-18)

“Prayer at its best opens earth to heaven.” (Selwyn Hughes)

“All our environmental problems become easier to solve with fewer people, and harder – and ultimately impossible – to solve with ever more people.” (Sir David Attenborough)

## Tuesday 1st January

Loving Father, as we face the challenges of this New Year, we pray for a world united in the resolve to meet humankind's greatest dilemma – how to find sustainable ways of using natural resources without jeopardising the survival of future generations.

Help us to work out ways to:

Feed an ever-growing population;

Order your world in peace and stability;

Devise a just trading system that will protect the poor;

Use wisely the discoveries of science and technology.

Send your Holy Spirit to guide us in all these ways and to go with us in the lifestyle decisions we will all have to make.

## Wednesday 2nd January

A study by the Global Carbon Project finds that CO<sub>2</sub> emissions from fossil fuels and industry rose in 2018 for the second year running, hitting new record highs that underscore the scale of the challenge the world faces if it is to avert runaway climate change and keep the Paris Agreement on track. India, which currently accounts for 7% of global emissions, saw its 2018 emissions increase by 6.3% due to demand for coal, gas and oil. However, 19 countries representing 20% of global emissions have seen their emissions decline without impacting their GDP. These include most of Europe, the USA and Uzbekistan.

## Thursday 3rd January

A [report](#) from the World Resources Institute called 'Creating a Sustainable Food Future', commenting on the UN prediction that by 2050 there will be 9.8 billion humans on Earth (2 billion more than at present), says that this

population growth, combined with increasing affluence, means that global food demand is expected to increase by more than 50%, while demand for animal-based foods such as meat and dairy will grow by 70%. "If today's levels of production efficiency remain constant till 2050, then feeding the planet would entail clearing most of the world's remaining forests, wiping out thousands more species and releasing enough greenhouse emissions to exceed the 1.5 and 2°C warming targets enshrined in the Paris Agreement – even if emissions from all other human activities were eliminated." Proposed solutions include drastically decreasing meat consumption in rich countries, reducing food waste and intensifying food production via technological innovation enabled by redirecting funding from subsidies to research and development. The authors highlight the need to curb population growth by increasing educational opportunities for girls, boosting family planning and reducing infant and child mortality.

## Friday 4th January

The report promotes the achievement of replacement-level rates of global population growth (no more than two children per woman). If sub-Saharan Africa reduces its current fertility rate of more than 5 children per woman to replacement level by 2050, its population would grow to 1.8 billion instead of the expected 2 billion. This would mean that the growth in crop demand would fall by nearly one-third and farmers would need to clear 163 million fewer hectares of forests and savannas for agriculture than expected, reducing the gap between the projected level of greenhouse gases and what was needed to meet the Paris Agreement target of

cellulose and the uppers use a blend of sustainable Merino wool and eucalyptus fibres. Allbird is now re-designing the rest of its footwear to include plant-based soles.

## Friday 25th January

Shell has become the first oil major to link the pay packets of top executives to its targets on carbon emissions. Under the plan, its board will set 3 to 5 year targets to shrink the group's carbon footprint each year and to judge the success of these goals when setting bonus payments to its executives. Jeanne Martin of ShareAction said: "As the world hurtles towards a possible climate breakdown, we need to see leadership as never before. We applaud Shell for listening to its shareholders – big and small – and taking a lead in setting carbon emissions reduction targets."

## Saturday 26th January

On December 11<sup>th</sup> a 1.5 magnitude earth tremor was [recorded](#) at Blackpool, causing Cuadrilla yet again to cease its fracking operations. Tony Bosworth of FoE said: "It appears they cannot frack without triggering tremors, but instead of acknowledging that fracking needs to end, Cuadrilla is urging a relaxation of regulations around earthquakes. We've always said that fracking poses risks for our climate and environment. After today's quake, and with the effects of climate breakdown already happening around us, isn't it time to put a stop to fracking once and for all?"

## Sunday 27th January

Save us, Father, from reliance on short-term fixes and our own ingenuity as we strive to repair the damage that we have wrought to

your world. While acknowledging our reason to be your most precious gift, inspire us to put our trust in you alone, who gave us your Son for our salvation.

## Monday 28th January

Because solar and wind energy is unpredictable, the capacity to store electricity is critical. Los Angeles has plans to install an array of 18,000 batteries that will be charged by wind power at night and by solar in the morning while energy needs are low. The same concept holds for the Government's trial of Vehicle to Grid technology. Using a mobile app, any customer of Ovo Energy who owns a Nissan Leaf car can plug in to a charger at home, which will charge the car when demand is low and export any surplus energy to the grid when demand is high. One thousand households have been selected for the 2-year free trial.

## Tuesday 29th January

Unwanted food is often thrown into a waste bin and ends up in landfill, where it produces methane, a potent greenhouse gas. Now, however, Government proposals will force households to collect food in a separate caddy, from where it will go into an anaerobic digester and be broken down into sludge, carbon dioxide and methane, which can be used for generating energy. The sludge can be used as a fertiliser. From now on, food manufacturers will have to fund up to 100% of the cost of food recycling, so giving local councils extra money, which they must use to improve recycling facilities.

## Wednesday 30th January

Stella McCartney, speaking about fashion garments at a Bloomberg Philanthropies

intensity of forest fires, the effects of melting ice sheets on the jet stream and the rising risk of permafrost thaw, which would release trapped methane.” Professor Betts of the Met Office added: “As a scientist, it’s frustrating to see we’re still at the point where temperatures are going up and so are emissions. I’ve been in this for 25 years. I hoped we’d be beyond this by now.”

#### **Saturday 19<sup>th</sup> January**

An analysis by the Solar Trades Association finds that plummeting costs of solar projects are making them competitive with other forms of new generation such as onshore wind farms and gas power plants. However, a layman might well ask: If the viability of renewable energy projects is to be judged purely by their short-term cost implications, where does this leave the absolute necessity to lower global emissions to net-zero by mid-century – whatever the short-term costs?

#### **Sunday 20<sup>th</sup> January**

We thank you, Lord, for the men and women who have given their lives to the protection of your beautiful world. We pray that their labour and sacrifices may not be in vain, but that the torch they lit may be carried by the rest of us as long as it takes to free your world from pollution, degradation and the bitter harvest of human greed.

#### **Monday 21<sup>st</sup> January**

Ethylene works as a natural hormone which causes fruit and vegetables to ripen and then rot. Food wasted due to the action of ethylene costs each family around £700 a year. Now food tech company It’s Fresh has developed a form of packaging that absorbs ethylene, so improving the product’s lifespan. Trials with

blueberries and strawberries have improved their lifespan by up to 50%, resulting in a 40% reduction in wasted food. Now Morrisons is trialling this solution for its berry packaging, with a view to a wider roll-out if the trial proves successful.

#### **Tuesday 22<sup>nd</sup> January**

The Massachusetts Institute of Technology has developed an energy storage system which uses surplus power generated from solar panels to heat tanks of molten silicon. When the silicon is heated to high temperatures, it produces light which can be captured by solar panels positioned above the tanks, so generating more clean power. Researchers estimate that when the system is scaled up, it could be used to power a small city.

#### **Wednesday 23<sup>rd</sup> January**

The agriculture sector is a major emitter of greenhouse gases. Now however, robots fitted with cameras are claimed to provide field data which enable farmers to optimise their harvesting techniques, so reducing costs, fuel and food waste. John Lewis and Partners are trialling three models, one that is capable of cutting crops, another that can pick weeds with minimal use of herbicides, and a third which is designed to plant crops efficiently.

#### **Thursday 24<sup>th</sup> January**

Roughly 20 billion pairs of shoes are made annually, eventually to be thrown away. Sugar cane harvesting results in a huge volume of waste. Now US sportswear company Allbird has launched a line of plant-based biodegradable trainers called Tree Toppers. The soles are made from sugar-based

keeping global warming within 2°C. However, none of the WRI proposed solutions would be effective in isolation and all of them must be implemented quickly and effectively in order to prevent hunger while safeguarding the environment,

#### **Saturday 5<sup>th</sup> January**

Singapore-based palm oil company Wilmar, which supplies 40% of the world’s palm oil, under pressure from environmental groups, has announced that all of its suppliers involved in deforestation and new development in peatlands will henceforth face “immediate suspension”. Its policy of ‘No deforestation, no peat, no exploitation’ will be fully implemented from 2020 onwards. Kiki Taufik, head of Greenpeace’s Indonesian Forest campaign, commented: “If Wilmar keeps its word, by the end of 2019 it will be using satellites to monitor all its palm oil suppliers, making it almost impossible for them to get away with forest destruction. Greenpeace will be watching closely to make sure Wilmar delivers.”

#### **Sunday 6<sup>th</sup> January**

Father, we pray:

Let there be peace on earth, and let it begin with me.

Let there be love on earth, and let it begin in my heart.

Let there be miracles on earth, and let them begin with my faith.

Let there be a sustainable future for your children, and let it begin with my actions now.

#### **Monday 7<sup>th</sup> January**

The draining of peatlands for palm oil plantations and subsequent fires in Indonesia caused massive pollution across south east

Asia. Now the Indonesian Government has passed strong [legislation](#) to defend the peatlands that remain, and its plans to ‘rewet’ 2 million ha of peatland were praised at the climate talks in Poland. However, delegates were told of recently-discovered peatlands in Congo which lock in 30 billion tonnes of carbon. If these were lost, the effects on the climate would be immense.

#### **Tuesday 8<sup>th</sup> January**

The recent fire on Saddleworth Moor near Manchester was calculated to have released 273,000 tonnes of CO<sub>2</sub> into the atmosphere, the equivalent of 1.2 million flights from London to Katowice. Drying out peatlands for plantations or arable farming is highly wasteful of our planet’s resources. Across the EU 30% of agricultural emissions come from peatlands. As the soil dries out, nutrients are released from the organic matter, first potassium, then phosphorus, then drought problems follow. Professor Joosten of the Greifswald Mire Centre believes we need a transformation of agriculture. “We only have dry farming because the technologies we still rely on were developed in the Middle East millennia ago. We have to learn to farm wet land.”

#### **Wednesday 9<sup>th</sup> January**

According to WWF’s Living Planet Report, published last October, animal populations have decreased by 60% since 1970 and are still decreasing. A quarter of the world’s animals and one-fifth of its plants are under threat of extinction. At the UN Biodiversity Conference in November, 195 governments agreed to scale up investments in nature and people to meet by 2020 the Aichi Biodiversity Targets agreed in 2010. One of those targets

is to eliminate or phase out subsidies that are harmful to biodiversity and to develop positive incentives for the conservation and sustainable use of biodiversity.

#### Thursday 10<sup>th</sup> January

Tony Juniper in [The Ecologist](#) outlines three major factors that cause the destruction of biodiversity:

- 1) Our food system. We use vast areas of land to grow crops to feed animals for us to eat. If the top 2 billion consumers cut down their meat and dairy consumption by just 40%, it would free up an area of land twice the size of India.
- 2) Land use. After the end of World War 2 our agricultural system intensified. It's not just habitat change, it is system change and intensification that's destroying wildlife.
- 3) Fragmentation. We've divided up land into fields, roads and airports. Wildlife can no longer move freely

"All this is an assault on the fabric of living systems. It's supposedly the price of progress - we need to keep prices down, to increase our competitiveness. But you can't do business in a planet that's in chaos."

#### Friday 11<sup>th</sup> January

From today until the 13<sup>th</sup> the Christians Aware conference takes place at The Hayes, Swanwick, Derbyshire DE55 1AU under the title "Future Earth? Sustainability for the Environment, Farming and Healthy Food". The conference opens with an address by Professor John Wiberley of the Royal Agricultural University, Cirencester, and there are seminars on Sustaining Water Supplies, Fair Trade, Climate Resilient Agriculture etc.

For further details and booking, please contact Christians Aware, 2 Saxby Street, Leicester LE2 0ND Tel. 0116 254 0770.

#### Saturday 12<sup>th</sup> January

The Welsh Government has [announced](#) a new planning policy which rules out any proposals for open or deep mining of coal or colliery spoil disposal. It says that "the continued extraction of all fossil fuels, including shale gas, coal bed methane and underground coal gasification is incompatible with targets for decarbonisation and increased renewable energy generation." Tony Bosworth of FoE called on the Westminster Government to follow this lead: "It's time to consign coal to the history books and to end fracking. The Government must prioritise renewable energy and helping people to make their homes more energy-efficient."

#### Sunday 13<sup>th</sup> January

We thank you, dear Father, for the work of scientists and technologists who are striving to find solutions to the intractable problems of our time as we struggle to meet the challenges of global warming, feeding an ever-growing population and protecting the natural world.

#### Monday 14<sup>th</sup> January

Poland, as the most coal-dependent country in Europe, was a suitable country for the UK to launch its 'Powering Past Coal Calculator', a free online tool designed to help governments, companies and civil society with accurate information about coal assets and associated climate risks. Dr Ben Caldicott, who devised the tool, said: "Using this calculator we can now verify and evaluate

claims to mitigate climate change objectively and transparently. Assets that are incompatible with carbon budgets face a higher risk of stranding due to action on climate change. Since the data required for this analysis do not exist in one place, few stakeholders know the real stranded asset risks facing coal assets."

#### Tuesday 15<sup>th</sup> January

Energy Minister Clare Perry also unveiled the world's first 'Net Zero Carbon Hub' to support energy-intensive industries such as steel, ceramics, cement, chemicals, paper and glass, which together account for 25% of UK greenhouse gas emissions. She said: "Tackling industrial emissions could help the country meet its long-term emission targets, create millions of green jobs and drive exports as other countries look to develop their own zero-emission strategies. That's why I'm launching a mission to create the world's first net-zero carbon cluster by 2040 with up to £170M. This will help develop the technologies of the future to transform industry around the world, ensuring the UK seizes the economic opportunities of moving to a greener, cleaner industry."

#### Wednesday 16<sup>th</sup> January

Maersk, which operates more than 780 container ships around the world, has pledged to become a carbon-neutral business by 2050. Working with governments and industry to spur the development of net-zero shipping, it will make these technologies commercially viable by 2030. "The only way to achieve the IMO's target of halving CO<sub>2</sub> emissions from 2008 levels is by fully transforming to new carbon-neutral fuels. We cannot do this alone." Maersk is also set to

invest in retrofitting its existing vessels, purchasing electric ground vehicles, sourcing renewable power and installing renewable energy technologies. Earlier, food giant Cargill announced a competition to incentivise innovative solutions to the carbon challenges of world shipping.

#### Thursday 17<sup>th</sup> January

Over 1,000 financial institutions have now pledged to offload high carbon assets such as coal, oil and gas. These include pension funds such as New York State, universities such as Harvard, Yale, Oxford and Cambridge, insurance companies such as AIG and the Vatican itself. Nico Haerigen of 350.org said: "Getting our public institutions to go Fossil Free is something we can all do. Whether it is our university, our local government or our pension fund, we can turn off the money tap to polluting industries and we can force them to make better choices, such as investing in local renewable energy. It's something that we see happening everywhere, with a momentum all of its own."

#### Friday 18<sup>th</sup> January

The Met Office has reported that the searing heatwave that hit the northern hemisphere last summer was made 30 times more likely by human-caused climate change. Hans Schellhuber of the Potsdam Institute told delegates to COP24 that a rise of 3°C above pre-industrial levels would see southern Spain become part of the Sahara. Even a rise of 2°C could not be guaranteed as safe. Johan Rockstrom of the Swedish Resilience Centre said: "Cracks in the climate system are pushing nature from being a friend that absorbs CO<sub>2</sub> to an enemy that releases it. These concerns are fuelled by the growing