Houston Accord, a comprehensive and binding agreement to reduce greenhouse gas emissions by 90% before 2050. This was supported by every nation on earth - including the US, China, India, Brazil, Russia and Indonesia.

#### Sources:

"The World We Made" by Jonathon Porritt Living Earth (Soil Association)

# www.edie.net

Additional Prayers

If you would like to receive the prayer diary each month by <u>email</u> (free), please email <u>prayer-</u> <u>guide@christian-ecology.org.uk</u>

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Picture on front cover: Autumn Gifts by Poppy Pickard

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# Prayer guide for the care of creation



# November 2013

You may ask for anything in my Name and I will do it."

(John 14.14)

"Praying in his Name does not mean attaching the Name of Jesus to our list of wants and desires, but seeking to know whether or not our desires coincide with his. When we pray in his Name, then we receive whatever he knows it is right for us to receive." (Selwyn Hughes)

"If the request isn't right, he answers 'No', If the timing isn't right, he answers 'Slow', If we aren't ready yet, his answer is 'Wait', When everything is ready and right - - -His answer is 'Go'.

(Anon)

"The work of praying is pre-requisite to all other work in the kingdom of God, for the simple reason that it is by prayer that we couple the powers of heaven to our own helplessness." (Ole Hallesby)

Lord, we lift up to you the witness of Christian thinkers, teachers, scientists and commentators on the environment and the world that you created. We thank you for those who have worked to create beauty, fruitfulness and order. We pray for our generation, that we may hand on to our successors



## Friday 1<sup>st</sup> November

Britain's first new nuclear reactors for 25 years will be built by the French EDF Energy and China's Nuclear Power Engineering Company at Hinkley Point, Somerset, for a cost of £14 billion. The two reactors will provide about 7% of UK electricity. The regulator Ofgem says that the new reactors will not be available before 2018 and the odds of an energy blackout, while low, will quadruple between now and 2015. FoE comments:

"Nuclear power takes decades to build, but climate change and energy challenges are upon us now. This focus on nuclear distracts from more urgent priorities such as delivering energy efficiency to households who are suffering rocketing energy bills due to the rising price of gas. The Government must listen to investors who are calling for a 2030 electricity decarbonisation target in the Energy Bill and focus on the measures to deliver it."

# Saturday 2<sup>nd</sup> November

The annual CEL members' meeting takes place today at St. Aloysius Church, 20 Phoenix Road, London NW1 1TA followed by an exploration of different 'Rules of Life'. Doors open at 1 pm.

### Sunday 3<sup>rd</sup> November

Lord God our Creator, who has made this planet to sustain a myriad forms of life, help us to stop abusing it for wrongful gain, exploiting it for selfish greed and spoiling it through callous indifference.

Help us to be responsible, caring stewards of our inheritance, and give us wisdom to find the right means to sustain it. Amen.

# Monday 4th November

The UK is one of the few European countries whose greenhouse gas emissions rose in 2012, yet we are committed to cut our emissions by 80% by 2050 compared to 1990 levels. To achieve this, the Committee for Climate Change says we must have a carbon-free electricity grid by 2030. That means building the equivalent of 11 Hinkley Point reactors within 17 years. If, by 2050, energy use falls from an annual 2400 terawatt hours (as now) to around 1400 TWh thanks to better energy efficiency, the increasing use of electricity for heating and transport will still need an extra 500 TWh. Nuclear power will need to supply 200 TWh of this, implying the need for 10 more plants like Hinkley Point.

# Tuessday 5<sup>th</sup> November

The Government in 2011 accepted the 4<sup>th</sup> carbon budget for 2023-27 which requires us to have reduced greenhouse gas emissions by 50% from 1990 levels, but now says it will review the budget in 2014. David Cameron, when in opposition, championed the Climate Change Act as a legal framework that heeds the science and gives long-term certainty to businesses and investors. At last month's Conservative Conference he highlighted the value of the green economy. Without a renewed commitment from the Prime Minister, there continue to be doubts about the carbon reductions to which Britain is committed.

#### Wednesday 6<sup>th</sup> November

The Grantham Research Institute at the London School of Economics has shown that fossil fuel reserves far exceed the carbon budget needed to avoid global warming of 2 degrees C., yet in 2012 \$674 billion was spent on finding and developing new sources of fossil fuels. New research by Oxford University's Smith School of

- 5. Strengthen the UN, pay off all arrears of contributions and increase its budget.
- 6. Aware that constant growth on a finite planet is a pathetic delusion, stop demanding economic growth and prioritise well-being.
- 7. End deforestation, over-fishing and all development that damages biodiversity.
- 8. Support the Earth Corps initiative and fund it with radical cuts in military expenditure.

#### Wednesday 27th November

Oil production fell from 76 barrels a day in 2017 to just 4 million in 2050 following an Emergency Report from the IPCC in 2016 and a disastrous spill of contaminated waste water from the Canadian tar sands which killed all life along a 160 mile stretch of the Athabasca River. Today's algae-based materials are so cheap and useful that they displaced nearly all the oil we once used for plastics, pharmaceuticals, paints. lubricants etc. The oil we still use is needed for aviation, shipping and high-value chemicals. The Philippines began in the early 2020s to use all the waste from production of rice, sugar, maize and coconuts to produce biodiesel for transport and biofuel for its power stations.

## Thursday 28<sup>th</sup> November

The obesity epidemic had gone global by 2030, with nearly 500 million people diagnosed with type-2 diabetes or cardiovascular diseases. In 2014 the US President imposed a 'soda tax' on all sugar-sweetened beverages. In 2016 China simply banned the sale of all drinks and foods that exceeded strict sugar levels. By the mid-20s governments around the world were taxing, regulating and proscribing sugar, salt and fat – despite their earlier policies of leaving it to the industry to regulate itself. Meanwhile the growth in meat consumption had led, by 2020, to 37%

of all farmland being used for the rearing of livestock and their food, while livestock contributed 15-20% of greenhouse gas emissions. However, health and environmental considerations led people to turn to artificial meats with less adverse impacts, while others simply became vegetarians.

# Friday 29th November

In 2019, five nuclear reactors in the US and two in the UK were devastated by a cyber-attack which took over their software and led to a shutdown. Millions of people had to be evacuated near the sites, causing chaos and disruption. Reactors around the world were closed to build additional defences against cyber attacks. This led to a worldwide boom in renewable energy, where improvements in the storage of electricity had smoothed out the intermittency of solar and wind power, while energy efficiency savings were at an impressive level. In 2022 a Nuclear Decommissioning Treaty was signed in Kiev, where the fallout from Chernobyl was well remembered. The Treaty ruled out building any new reactors, but existing reactors were allowed to continue to the end of their operating life.

#### Saturday 30<sup>th</sup> November

By 2016, after a decade's worth of Chinese investment in renewable energy as Chinese exports burgeoned around the world, alarm bells began to ring in America. Following a series of Katrina-like climate disasters, the third biggest insurance company in America went belly-up in 2017. US politicians finally came up with a "Rebuild America" programme funded by a "Cap and Prosper" scheme, under which permits to emit CO2 were auctioned to companies which sold fossil fuels, and the proceeds were shared between the "Rebuild America" programme and ordinary citizens. Two years later came the height. The Balgonie power station, built in 1922 and now supported by TLS Hydro, works as well today as it ever did. A small building the size of a garage can fit easily into the environment with little visual impact.

# Friday 22<sup>nd</sup> November

#### Are GM foods safe to eat?

While American rates of diet-related illnesses have soared, there is no evidence that eating GM food has caused human ill-health. Nor is there any evidence that they are safe to eat. However glyphosate-resistant GM crops have so encouraged the spread of glyphosateresistant weeds that, according to US government data, pesticide use on GM crops is higher than on non-GM crops. Because GM seeds are patented and cannot legally be saved, farmers are locked into continuing to buy them year after year, despite ever-rising costs. The Soil Association believes that 20th century GM technology is wholly unfit for the challenges of the 21st century – namely, to produce good yields of crops with lower inputs of fossil-fuelbased fertilisers, with 80% lower greenhouse gas emissions, and producing food with higher animal welfare, lower pollution levels, more wildlife and more jobs in farming.

# Saturday 23<sup>rd</sup> November

Every year, about 14 million girls are married before they turn 18, across many countries, cultures and religions. Often they are robbed of their childhood and denied their right to an education. *Girls Not Brides* is a global partnership of more than 300 NGOs from over 50countries committing to ending child marriage. Many South Asian governments perpetuate the legal and practical barriers that allow girls to be married off against their will without any legal remedy .www.girlsnotbrides.org

## Sunday 24th November

We thank you, loving Father, for the lives of men and women of resource and determination who have taken the lead in the struggle for justice, and those who work to protect your creation from exploitation and degradation. Help us, in our turn, to give of ourselves, not counting the cost, for the sake of your Son, who died to redeem us all.

#### Monday 25<sup>th</sup> November

Jonathon Porritt in his new book "The World We Make" writes the diary of one Alex McKay who, living in 2050, looks back over events since 2012. He details the rise of solar energy until, by 2018,unit costs have fallen bellow those of every other form of electricity.30% of electricity is now generated either by solar photo voltaics and through concentrated solar power whereby high-voltage DC transmission lines bring electricity direct from solar farms in North Africa through Europe's super-grid.

# Tuesday 26th November

In 2017 (he imagines) with youth unemployment at an all-time high, the "Enough!" movement exploded into life across the world, fuelled largely by social media. Its "Manifesto for Tomorrow" demanded the following:

- 1. An International Financial Transaction Tax, so that efficient capital markets can serve us, not the other way round.
- 10% of the resulting revenues to be spent on meeting the remaining Millennium Development Goals.
- A Carbon Tax, or a minimum price per tonne of CO2 emissions, to ameliorate climate change.
- 4. Make the system work for all, not just for the rich.

Enterprise & the Environment finds that the growing movement to disinvest from fossil fuels poses significant risks to investors. David Nussbaum of WWF comments:

"Prudent investors want to be ahead of the pack, not following the herd, so they will be preparing for a world where we leave fossil fuels in the ground – avoiding assets that cannot be realised safely in a carbon-constrained world . . . It's not as though we don't have solutions. We need to increase intelligent investment in sustainable renewable energy. This isn't just the best choice. It's ultimately our only option, because the way the world uses energy today is not sustainable and has to change."

# Thursday 7<sup>th</sup> November

Currently there are no binding EU targets for energy efficiency. Global companies including Siemens, Phillips and Schneider Electric have written to the Commission stating that only with a clear regulatory framework can they invest and offer affordable and accessible technologies and solutions essential for the development of a low-carbon economy. . . "We are strong supporters of ambitious, binding legislation for energy efficiency."

# Friday 8th November

A report from Ethex called "Positive Investing in the UK" finds that the public has invested £1.6 billion in positive investments that 'do good' while offering a financial return. These tend to lie in areas such as fair trade, renewable energy, poverty alleviation, organic farming, community shops and pubs, sustainable forestry, green transport, organic food and farming. Just under 700 businesses form the market for positive investment, ranging from well-known brands such as Café Direct, Good Energy and the Phone Co-op to specific environmental and social projects. "People now expect more from their money. They have lost trust in banks and money managers. They are looking for ways to invest directly, as evidenced by the rapid growth of crowd-funding. Positive investment allows people to invest direct into businesses they trust."

# Saturday 9th November

A new partnership between Volkwagen and Ecotricity will encourage purchasers of one of VW's 14 brands of electric car to turn to Ecotricity as a provider of electricity from renewable sources. This follows a finding from the Norwegian University of Science & Technology that it is counterproductive to promote electric vehicles in regions where electricity is primarily produced from lignite, coal or heavy oil combustion. Dale Vince of Ecotricity comments: "Ideally an electric car should be charged using 100% renewable energy. otherwise you are still powering it from fossil fuels. Running a car on green electricity from the wind and sun is the last piece of the jigsaw. It's the ultimate in green motoring."

## Sunday 10<sup>th</sup> November

Father, we pray for a vision of your world as your love would make it: A world where the weak are protected and none go hungry or poor;

A world where the benefits of life are shared;

A world where nations, races, cultures and religions live with mutual respect;

A world where peace is built with justice, and justice is guided by love;

And that we may have the courage and inspiration to play our part in building it.

# Monday 11<sup>th</sup> November

Under new EU regulations coming into force in 2015, waste paper, metals, plastics and glass must all be collected separately by local

councils. Currently about half of the 10.8 million tonnes of waste that we recycle annually is "comingled" and must be sorted at council sites to remove contaminants such as broken glass. Kerbside collections, where the homeowner separates waste into different boxes, allows councils to send the waste direct to reprocessing plants such as Eco-Plastics in Lincolnshire, which sorts through 140,000 tonnes of plastics a year, and Palm Paper in King's Lynn, which produces 450,000 tonnes of newsprint a year for British publishers.

#### Tuesday 12<sup>th</sup> November

David Palmer-Jones, CEO of Sita, comments: "Householders want to have as few obstacles as possible to recycling all the waste they can. British people have become so much more environmentally aware – so increasing the number of different bins is not the only answer." He suggests that a more innovative response to boosting recycling rates would be to return to the old-fashioned bottle deposit schemes, where we were rewarded directly for the objects we recycled.

# Wednesday 13th November

More than a third of the waste paper and plastic collected by councils for recycling is thought to be sent to China, while thousands of tonnes of rubbish are shipped to Denmark and Holland and incinerated to generate energy. The new EU regulations should improve the quality of recyclable materials, so encouraging reprocessing in Britain and helping to grow the £3 billion recycling industry with the 40,000 jobs that go with it.

# Thursday 14th November

According to research done by the Waste Recovery & Processing body (WRAP), grocery

manufacturers and retailers are throwing away £6.9 billion worth of materials a year in their supply chain – a 30% increase on previous estimates. Of the 3.9 million tonnes of food waste thrown away, 2 million tonnes is spread on the land and 1.3 million tonnes recycled. Of the packaging waste created by food and drinks manufacturers 60% is recycled, but 20% still ends up in landfill. Jamie Pitcairn of consultants Ricardo-AEA comments: "Resource use is not properly accounted for across supply chains and waste at each stage is not seen, resulting in a piecemeal approach. There needs to be a shortening of the chain with more transparency. which will expose the inefficiencies and enable new practices to be adopted."

# Friday 15th November

According to WRAP, 1.69 tonnes of organic waste was treated last year in anaerobic digestion (AD) plants, while a further 5.85 million tonnes was composted. AD capacity in the UK last year stood at 2.07 million tonnes, which suggests that Britain's 110 AD plants are not running to capacity, though a further 200 AD projects have received planning permission. The Green Alliance suggests that a total ban on sending food waste to landfill would save £508 million in avoided landfill costs and open the door to a political consensus that would be good for business and the environment. Currently 35% of food waste is sent to landfill, with just 7% treated in AD plants.

# Saturday 16<sup>th</sup> November

A new Government-funded loan scheme allows farmers to apply for up to £400,000 to help them finance onsite AD technology. This will save farmers money spent on energy, while the biofertiliser resulting from the AD process can replace some of the artificial fertilisers that farmers would otherwise have to buy. The Feedin Tariff also supports renewable energy projects such as these, though the Government has proposed a 10% cut in the incentive for small-scale AD plants. Richard Gueterbock of AD specialists Cleafleau comments: "The smallscale AD market needs a strong policy framework to encourage adoption of all renewable technologies. On-site AD can provide many benefits including lower energy and treatment costs. These deserve greater recognition by the food and drink industry, but also by government and regulatory bodies."

# Sunday 17th November

Father, we thank you for your great gifts of wisdom and ingenuity.

Help us to place them wholly at your service in the quest for technologies to protect your world and all the living creatures that live there.

# Monday 18th November

Bowing to pressure from the US aviation industry (see October 17<sup>th</sup>) the European Commission now proposes to extend the EU Emissions Trading Scheme only to flights within European airspace. This would leave 78% of global aviation emissions not covered. Although aviation accounts for only 5% of global warming, it is the fastest-growing source of emissions. However, the International Civil Aviation Organisation is planning a global market mechanism for all aircraft emissions by 2020, subject to agreement by all the interested parties.

## Tuesday 19th November

Virgin Atlantic has replaced its four-engined aircraft with the twin-engined Airbus 330-300, which produces 30% less CO2 than the aircraft it replaces. Next year the Boeing 787-9 will be introduced, which is 21% more fuel-efficient than the aircraft it replaces. On the ground, VA has reduced its energy use by 10% between 2009 and 2012 and diverts over 75% of its office waste from landfill. Its target is to reduce all aircraft emissions by 30% per revenue tonne kilometre from 2007 to 2020.

# Wednesday 20th November

WWF, commenting on the Government's new Arctic Policy, welcomes measures such as the conservation of Arctic species and biodiversity through marine protected areas, and respecting the rights of Arctic peoples. In time, with much improvement, it could be a model for other nations with emerging interests in the Arctic. But "Instead of looking to high-risk Arctic oil and gas for energy security, the UK and governments and industry across the world must heed the warning signs from a rapidlychanging Arctic by acting with urgency and ambition to tackle climate change and the transition to a renewable future."

# Thursday 21st November

According to the Department of Energy & Climate Change and the Environment Agency, the UK has an untapped potential for generating

850-1550 MW. of electricity from hydropower. Currently just 1.5% of UK hydro-electricity comes from large-scales schemes in the Scottish Highlands. But small-scale projects, supported by the Feed-In Tariff, have significant potential. By the end of 2012 Triodos Bank had financed 8 small hydro projects, with more in the pipeline. River water is diverted by a small weir into an underground delivery pipe, which feeds the water downhill to turbines within a power station, where electricity is generated before the water returns to the river. The power extracted depends on the volume of flow and the drop in