

to add another 3 million on the busiest days. Despite estimates by the International Olympic Organisation that commuter travel will fall by one-third owing to people choosing to work from home, and the £6.5 billion spent in upgrading and extending transport links, there are still worries that the transport system may not be able to cope.

Unlike the great boulevards of Paris and New York, most of London's streets have never been widened. Transport planners have identified lanes reserved for Olympic VIPs, officials and athletes, but regular users, such as taxis, will feel hard done by.

Heathrow, already Europe's busiest airport, is creating a special terminal for Olympic athletes, coaches and sponsors to fly out of Britain after the Games close. The day after the closing ceremony is set to be Heathrow's busiest day ever.

Sources:

"The Third Industrial Revolution" by Jeremy Rifkin (Palgrave Macmillan)
CIWEM Business News
www.edie.net

Additional Prayers

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

For further information and requests for prayer, please write or email:

Philip Clarkson Webb,
15 Valley View,
Southborough,

Tunbridge Wells TN4 0SY

Email:

pcw@christian-ecology.org.uk

Website:

www.christian-ecology.org.uk

Picture on front cover: Camellia in bud, by Poppy Pickard

Christian Ecology Link Ltd is a company registered in England and Wales.

Administrative Office:

10, Beech Hall Road,

Highams Park, London, E4 9NX

Company Registration No. 2445198

Registered Charity No. 328744.

tel: +44 (0) 845 4598460

info@christian-ecology.org.uk

Prayer guide for the care of creation

February 2012

"He who forms the mountains, creates the winds and reveals his thoughts to man, he who turns dawn to darkness and treads the high places of the earth – the Lord God Almighty is his Name." (Amos 4.13)

"You trample on the poor and force them to give you grain. Therefore, though you have built stone mansions, you will not live in them; though you have planted lush vineyards, you will not drink their wine. . . but let justice roll on like a river, righteousness like a never-failing stream." (Amos 5. 11 & 24)

"The cultivation and expansion of needs is the antithesis of wisdom. It is also the antithesis of freedom and justice. Every increase of needs tends to increase one's dependence on outside forces over which one cannot have control, and therefore increases existential fear. Only by a reduction of needs can one promote a genuine reduction in those tensions which are the ultimate cause of strife and war."
(E.F. Schumacher)



Wednesday 1st February

When Fritz Schumacher wrote "Small is Beautiful", he could not have imagined that energy might one day be generated from millions of small, local energy systems – solar, wind, geothermal, heat pumps and biogas systems. Yet, as declining fossil fuel supplies lead inevitably to rising costs, increasing numbers of people are turning to local sources of energy.

Thursday 2nd February

Jeremy Rifkin in "The Third Industrial Revolution" points out that when fossil fuel prices rise, everything else rises with them. "When oil went over \$80 a barrel in 2007, everything else went up. At \$120 a barrel we had food riots in 22 countries because the prices of wheat, rice and barley were doubling or trebling. At \$147 a barrel, prices became so prohibitive that consumers stopped buying. The collapse of the financial market 60 days later was just the aftershock."

Now we are in a new 4-year cycle of boom-and-bust. New discoveries of shale gas, tar sands and oil off Latin America are merely postponing the problem. They all emit CO₂. They are all dirty and with shale gas there are big issues of water contamination.

Friday 3rd February

Rifkin is equally dismissive of nuclear energy, despite its low-carbon reputation. But to have a minimum impact on climate change, we would need 2,000 nuclear power plants by 2060, not just the 400 we now have. That would mean building three new plants every 30 days for the next half century. Even with the existing 400 plants we face serious uranium deficits by 2035 unless we recycle uranium into plutonium – and

who wants that in an increasingly dangerous world? Finally, we don't have enough fresh water. Over 40% of fresh water in France is used to cool nuclear reactors. During the 2003 drought, water shortages forced many of France's reactors to shut down or operate below capacity.

Saturday 4th February

Rifkin proposes a revolution based on five principles:

- 1) A commitment by governments to drive forward renewable energy;
- 2) A massive expansion of distributed energy, with every building transformed into a renewable energy plant;
- 3) Solving the problem of energy storage, possibly by using hydrogen to store electricity in water for future use;
- 4) Creating a smart grid for measuring energy consumption in every building;
- 5) Using electric vehicles as a two-way power source-cum-storage tank. They take electricity from the grid, then feed it back to the grid when the vehicle is not used.

Sunday 5th February

Heavenly Father, we pray for all in positions of leadership, for heads of state, ministers, judges, civil servants and local government officers, that they may act with integrity and wisdom

In the justice they administer,
In the mercy they display,
In the wisdom of their policies,
In the integrity of their decisions.

This we pray in the Name of your Son, Jesus Christ.

population growth is not the same as controlling population. The most immediate and direct way to lower birth rates is to make sure that as many pregnancies as possible are intended ones, by ensuring that women can make their own choices as to whether and when to bear a child. Simultaneously, we need to rapidly transform our energy, water and materials consumption through greater use of conservation, efficiency and green technologies. We shouldn't think of these as sequential efforts – dealing with consumption first, then waiting for population dynamics to turn around – but rather as simultaneous tasks on multiple fronts."

Saturday 25th February

More than 2 in 5 pregnancies worldwide are unintended by the women who experience them, and half or more of these pregnancies result in births that spur continued population growth. Engelman has calculated that, if all women had the capacity to decide for themselves when to become pregnant, average global childbearing would immediately fall below the 'replacement fertility' value of slightly more than two children per woman. Population would then move onto a path leading to a peak followed by a gradual decline, possibly well before 2050. "Women must be able to make their own decisions about childbearing, free from fear of coercion or pressure from partners, family and society. And they must have easy access to a range of safe, effective and affordable contraceptive methods and the information and counselling needed to use them."

Sunday 26th February

Loving Father, help us to realise a vision of your world which cherishes its God-given resources, so that all your people may enjoy the natural

and spiritual gifts which you have given us; a world where all life may flourish in peace, without harm to the environment which we all enjoy.

Monday 27th February

Humans appropriate 24-40% of the photosynthetic output of the planet for food and other purposes, plus more than half the planet's accessible freshwater. In addition, we waste large quantities of food. According to the UN Food & Agriculture Organisation, industrialised countries waste 222 million tons of food annually. If fewer resources and less food were wasted, the world would be able to feed more people and consume fewer resources. With nearly 1 billion hungry people worldwide, wasting less food also means utilising existing resources – not new ones – to feed them.

Tuesday 28th February

Fishing for tuna often involves the accidental killing of many other marine species. Now the Marine Stewardship Council has certified as sustainable the Pacific Free School Skipjack Tuna Fishery, which operates around eight Pacific countries, including Papua New Guinea, the Solomons and Tuvalu. Its boats only use purse seine nets large enough to exclude non-target species.

They do not use "fish aggregation devices" such as buoys that are tethered to the surface to attract tuna, but which commonly draw in many other marine species. Also the total number of fishing days is capped and all boats must carry an observer.

Wednesday 29th February

London Underground trains normally handle 12 million trips a day. The Olympics are estimated

changes of this world, our hearts may surely there be fixed, where true joys are to be found, through Jesus Christ our Lord.
(The Book of Common Prayer)

Monday 20th February

The oceans are the biggest active carbon sink on earth, absorbing more than 25% of the CO2 that humans put in the air. Arctic sea ice is crucial to this process. According to research done at the Catlin Arctic Survey's Ice Base and published in the Journal of Geophysical Research, rapidly melting sea ice is weakening the Arctic Ocean's ability to capture and store atmospheric carbon. This is another example of the positive feedback mechanisms which are leading to continued rise in atmospheric CO2.

Tuesday 21st February

Planet Positive in partnership with Hubsphere has produced a fast online process to enable companies to measure and reduce their energy consumption and carbon emissions. Companies enter their energy data using Smart meters, and the process tracks other sources of emissions such as business travel, water and paper use, so providing an automatic carbon footprint. A dashboard provides figures, graphs and trends at a glance to help managers and green teams to find energy efficiencies that cut carbon and save money.

Wednesday 22nd February

2012 is the UN Year of Co-Operatives. 75% of Fairtrade producer organisations are co-operatives of small-scale producers. Last year, Fairtrade-certified small farmer organisations reported 447 million euros-worth of sales, as well as 38.3 million euros of additional Fairtrade

premiums for investment in community and business development. Yet funding from traditional lenders is often scarce. The Global Development Co-Operative aims to support co-operative businesses in developing countries by raising \$50 million to provide low-cost loans for capital projects. Paul Flowers, chairman of The Co-Operative Bank said: "Against a backdrop of financial crisis exacerbated by corporate greed and speculation, the co-operative model has proved one of the most enduring and successful ways of running a business. Despite the tough economic times, our 6 million customers want us to maintain support for development both home and abroad. It's important we use the influence of the co-operative movement to support communities across the developing world."

Thursday 23rd February

A drought in Northern Mexico has dried up water supplies for over 2.5 million people in more than 1,500 small communities. For many towns, water has had to be transported by truck, treated on the spot and stored in tanks. Seven Mexican states are suffering from drought while other parts of Mexico are troubled by severe floods and hail. Last year, Mexican farmers lost an estimated 2.2 million acres (900,000 hectares) of crops to dry conditions.

Friday 24th February

According to UN estimates, about 4.5 billion people have been added to the world population in the last 60 years, putting ever-increasing strain on the world's ecosystems and resources. Robert Engelman, president of the Worldwatch Institute, comments:

"Fortunately there are ways to slow population growth practically and humanely and to reduce the impacts associated with it. Addressing

Monday 6th February

Rifkin suggests we should zoom in on the number one source of carbon emissions, namely buildings.

Our homes, offices and factories are our energy infrastructure. Our ambition should be to convert all the 191 million buildings in the EU into green power plants. "So you get solar off your roof, wind off your walls, geothermal heat from under your ground, energy from your waste anaerobically-digested and ocean tides if you are on the coast."

Rifkin has served as adviser to EU presidents and to Angela Merkel. Now his five principles have been endorsed by the European Parliament.

Tuesday 7th February

The crunch point for many who wish to convert their homes into "green power plants" is the lack of available finance. Most people's priority is to stop unnecessary heat loss by installing effective insulation. The Government's Green Deal, due to take effect in October, aims to remove the need to pay upfront for energy efficiency measures and green technology. While there are still outstanding issues in applying the Green Deal to non-domestic buildings, for our homes the Green Deal will pay a key part in powering Britain's transition to a low-carbon economy.

Wednesday 8th February

Research by ASDA among its shoppers between last January and September found that 96% of respondents cared about green issues and 70% claimed they were very important to them. Waste reduction was one of their top five priorities. Marks & Spencer is using in its fruit packaging a strip containing a mixture of

minerals which absorb ethylene – the hormone which causes fruit to ripen and eventually rot. Trials showed that the strips prolong the life of stored fruit by up to two days and result in a saving in wastage of at least 4%.

Thursday 9th February

A report from Carbon Tracker finds that only 20% of global fossil fuel reserves can be burnt by 2050 if we are to have an 80% chance of staying below the "safe" level of 2 degrees warming above pre-industrial levels.

The International Energy Agency's World Energy Outlook states that only a fraction of known fossil fuel reserves can now be safely exploited.

These findings expose UK investors, through their pension funds and savings, to significant risks as coal (the most carbon-intensive of fossil fuels) faces tightening emission regulations around the world. Currently, Stock Exchange investments in coal alone would generate 400 times the UK's annual CO2 emissions from coal if the coal was to be burnt.

Friday 10th February

A report from Policy Exchange claims that green energy would cost every household an extra £400 a year by 2020, equivalent to 2.5 p. on VAT. This, it claims, is due to government subsidising "expensive renewables" such as offshore wind, rather than cheaper ways of reducing carbon emissions.

However, RenewablesUK points out that gas prices have more than doubled over 10 years and the real danger to households comes from the price volatility of imported fossil fuels. Britain's fantastic wind power resource – the best in Europe – can help reduce energy price volatility. Furthermore, expansion of offshore

wind could bring more than 70,000 extra jobs in the manufacturing and maintenance sector.

Saturday 11th February

With the commissioning of the Ormonde wind farm off the Cumbrian coast, Britain now has over 6 gigawatts of installed wind capacity – enough to power 3 million homes – with a further 19.5 gigawatts of capacity under construction, consented or in planning. Danny Alexander, Chief Secretary to the Treasury, said: “This is a significant milestone which demonstrates the increasingly important role that renewable energy is playing in the UK’s energy mix. Working together, we are eager to ensure that the UK becomes the natural home for the most innovative, ambitious and inspiring renewable energy companies in the world.”

Sunday 12th February

Dear Lord, our heavenly Father,
In a world of darkness, give us your light;
In lands of war and prejudice, grant us your peace;
In a world of despair, give us hope;
In a world of sadness and tears, show us your joy;
In a world of hatred, show us your love;
In a world of arrogance, give us humility;
In a world of disbelief, give us faith;
Give us the courage to face the challenges of feeding the hungry, clothing the naked, housing the homeless and healing the sick.
Give us the power to make a difference in your world, and to protect your creation.
(Anna Crompton)

Monday 13th February

Oil and gas company Cuadrilla has gained licences for hydraulic fracturing at sites in Surrey, Kent and Sussex, though its CEO, Mark Miller, has admitted that “fracking” can cause water pollution and has led to minor tremors in the Blackpool area. However, Professor Mike Stephenson of the British Geological Survey said that the distance between groundwater supplies (40–50 metres below the surface) and sources of shale gas (1–2 miles underground) made it unlikely that methane would leak into water supplies.

A Green Party spokesman commented: “Saving energy in homes is much more important than risky industries like shale gas, and would create many more jobs.”

Tuesday 14th February

According to the World Development Movement (WDM), using figures from the US Energy Information Administration, each British resident was responsible, on average, between January 1st and 13th for the same amount of carbon emissions as the average Kenyan over a whole year. Kenya’s annual per capita emissions are 0.293 tons, while the UK’s are 8.351 tons. WDM commented:

“This is a stark reminder of the UK’s responsibility for climate change. Developing countries like Kenya make almost no contribution to the problem, yet they face the worst consequences. Meanwhile the UK is failing to make sufficient cuts in emissions to meet its obligations to help poorer countries cope with the effects of climate change.”

Wednesday 15th February

Australia’s Queensland University of Technology is launching a 3-year project to

develop ways of storing and distributing renewable electricity more effectively. Professor Ledwich explains: “Winds are variable and solar power is not always available during peak evening usage times. Our aim is to develop new storage and management systems to better harness all the electricity sources available and give the grid greater strength. The answer lies in creating local responses to overloads as well as balancing renewables.. If we can better store locally the vast amounts of renewable energy Australia is capable of producing, we’ll be able to develop a stronger electricity network and significantly reduce our greenhouse gas emissions.”

Thursday 16th February

A KickStart sustainable energy fund has been launched to bring solar lighting to off-grid communities in East Africa. The fund is part of a partnership between Eight19 and SunnyMoney and aims to roll out pay-as-you-go solar lighting to rural communities. Following installation, users pay for the electricity on a weekly basis using scratchcards similar to pay-as-you-go mobile phones. The revenue from the scratchcards is then used to recover the cost of the units and allow KickStart to deploy additional units to new users. Registered charity SolarAid, the owners of SunnyMoney, believe the scheme could bring enormous economic benefits to local communities across the developing world.

Friday 17th February

Airport expansion in the South-East is back on the Government’s agenda following a report from the Civil Aviation Authority claiming that new runways are needed in order to meet consumer demand.

However, a new report from WWF and the Aviation Environmental Federation uses

forecasts by the British Airport Authority made at the Terminal 5 enquiry which show average passenger numbers per aircraft increasing from 143 to 198 over time. Assuming that other airports show a similar trend, the conclusion is that the shortfall in capacity by 2050 would be less than 1% - hardly enough to justify the huge cost of new runways.

This accords with the recommendation by the Committee on Climate Change to limit aviation growth so as to ensure that the sector plays its part in limiting UK carbon emissions.

Saturday 18th February

The trend towards larger planes and higher passenger loading means that there is already sufficient capacity across London’s six airports and seven runways to meet demand up to 2050.

Add to this a decline in domestic flights, growth in rail travel, greater use of video-conferencing and reduced business flying, and it becomes impossible to justify further expansion, especially as it would ruin the UK’s chances of meeting its legally-binding climate targets. WWF comments: “Long ago it became obvious that we could not simply build more roads for yet more cars. We need a similar shift in thinking for future aviation policy. Air travel is the UK’s fastest-growing source of carbon emissions. If we build a new runway or airport in the South-East, we will be building the single biggest source of carbon in the country, at a time when we should be rapidly reducing our emissions.”

Sunday 19th February

Almighty God, who alone canst order the unruly wills and affections of sinful men, grant unto thy people that they may love the thing which thou commandest, and desire that which thou dost promise, that so, amid the sundry and manifold