

Talking Cents

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Talking Cents is an ecumenical group charged by the Anglican Diocesan Council to promote an alternative to current economic and political thought, and to encourage debate within the church. Ministry units are encouraged to distribute these articles. This article is contributed by Mary Betz from the Justice and Peace Commission of the Catholic Diocese of Auckland.

Solving Climate Change = Science + Economics + Politics + Love

The Fifth Assessment Reports (AR5) of the International Panel on Climate Change (IPCC) have now nearly all been released. Volumes 1) Physical Science Basis of Climate Assessments; 2) Impacts, Adaptation and Vulnerability; and 3) Mitigation, are already available, with a Synthesis to follow later this year. (<http://www.ipcc.ch/>).

The news is not good news. Increasing carbon dioxide (CO₂) concentrations have already caused a global temperature rise of 0.8°C since 1900. While that might not seem like much, scientists agree that a maximum rise of 2°C is all that could be sustained without major impacts on the human and other biological and physical systems on our planet. This rise has been proven with 95% probability to have been caused by human activities – largely the burning of fossil fuels which began in the Industrial Revolution, but intensified with economic growth in the 1970s.

Our CO₂ emissions are largely from the use of fossil fuels for energy (transportation, electricity, heating, industry), but also from deforestation. Methane, a more potent greenhouse gas, is also a major contributor to warming, released by ruminant animals raised for meat and dairy products, as well as from warming permafrost in Arctic regions.

In the fourteen years since the turn of the 21st century, we have experienced the twelve hottest years on record. We have also seen an increase in the frequency and intensity of floods, droughts, hurricanes and cyclones in both rich industrialised and poorer developing countries. Not only have they costs hundreds of billions of dollars, but also lives, livelihoods and long displacements. Four million people are still displaced from Typhoon Haiyan in the Philippines.

These and other recent impacts of climate change are cited in a recent talk by Christina Figueres, the Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC).

Working in parallel with IPCC, the UNFCCC gathers the world's nations each year to try to negotiate agreements to stop global warming. (<http://www.stpaulsinstitute.org.uk/dialogue/st-pauls-institute/article/2014/may/09/-climate-change-building-the-will-for-action>).

Figueres says “Unchecked, the rise in greenhouse gases could increase global average temperatures by 3, 4 or even 6 °C” by the end of this century. This rise would wipe out social and economic advances in developing countries “over the past 25 years, making it almost impossible for developing countries to adapt to new levels of disaster...” Impacts will not just be on developing countries, however. Extreme weather events would affect us all, as would subsequent mass migration and heightened conflicts. A recent documentary series, *Years of Living Dangerously*, links the war in Syria with prolonged drought. Similar links between environmental crises and political instability can be made in sub-Saharan Africa and the Sudan, and likely elsewhere.

To prevent the massive impacts associated with the climate warming more than 2°C, Figueres says “we must peak global emissions in the next 6 to 10 years, and reach carbon neutrality in the second half of the century, leaving most of the fossil fuel reserves in the ground. A tall order from where we stand today.” We, of course, stand today in New Zealand, which has opted out of Kyoto commitments to reduce carbon emissions to 1990 levels, and instead has increased them by 25% between 1990 and 2012. (http://www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-progress-indicators/home/environmental/greenhouse-gas-emissions.aspx).

One trillion dollars has been invested to date in renewable energies around the world, but this amount is needed on an annual basis. The global financial system has for many years funded the exploration and production of fossil fuels, but this is slowly beginning to change. The World Bank

commissioned a report, *Turn Down the Heat*, (<http://documents.worldbank.org/curated/en/2013/06/17862361/turn-down-heat-climate-extremes-regional-impacts-case-resilience-full-report>) in 2013. In its forward, the President of the World Bank says “unless the world takes bold action now, a disastrously warming planet threatens to put prosperity out of reach of millions and roll back decades of development.” The World Bank Group has pledged to looking at future funding through a ‘climate lens.’

Fiscal organisations may have economic rather than ecological motives for stopping climate change, but their cooperation is crucial for global change. Even the International Monetary Fund (IMF) is looking at fiscal responses, including reducing subsidies on fossil fuel investment (<http://www.imf.org/external/np/exr/facts/enviro.htm>). IMF Chief Christine Lagarde said earlier this year: “We are subsidizing the very behaviour that is destroying our planet, and on an enormous scale. Both direct subsidies and the loss of tax revenue from fossil fuels ate up almost \$2 trillion in 2011...” She called the impacts of climate change “merciless” and quoted estimates that “40% of the land now used to grow maize in sub-Saharan Africa will no longer be able to support that crop by the 2030s. This will have hugely disruptive implications for African livelihoods and lives.

A more grassroots approach is gaining momentum in the UK, Europe, North America, Australia and New Zealand – divesting from fossil fuels. Dunedin has become the first city in New Zealand to commit to divesting itself of fossil fuels. The Anglican Province of Aotearoa, NZ and Polynesia is leading the churches, agreeing to divest itself of investment in major oil and mining companies by 2016. 350, an organisation working to reduce global CO₂ concentration to 350ppm from its current dangerous 400ppm, supports divestment. Says spokesperson Ashlee Gross, “it is no longer ethical to try to make a profit from the industry that is the leading driver of climate change” (<http://pacific.scoop.co.nz/2014/05/anglican-church-to-divest-from-fossil-fuels/>).

Multi-faith groups in Australia and North America have recently sent a letter to Pope Francis citing the immorality of profiting from fossil fuels (<http://www.theguardian.com/environment/2014/apr/16/letter-pope-francis-fossil-fuel-divestment>). A positive response would surely be consistent with the concern for the environment expressed by Francis throughout his Papacy. During an audience in May, the Pope said “Custody of Creation is custody of God’s gift to us and it is also a way of saying thank you to God ... [T]his should be

our attitude towards Creation. Safeguard Creation. Because if we destroy Creation, Creation will destroy us! Never forget this!” <http://www.news.va/en/news/pope-at-audience-if-we-destroy-creation-it-will-de>

The Vatican announced in January that Francis had begun work on a major document on ecology. It also sponsored a conference in May, hosted jointly by the Pontifical Academies of Sciences and Social Sciences called “Sustainable Humanity, Sustainable Nature: Our Responsibility.” American environment writer Andrew Revkin was invited to sum up his impressions of the four-day meeting of scientists, philosophers, theologians and economists. While summing up the scientific and economic factors involved in climate change, Revkin also noted that deeply engrained psychological traits can “prevent us from acting rationally in the face of threats with long time scales, dispersed impacts and inherent complexity.”

Thus while human beings are biologically equipped to respond to immediate threats, complex threats like climate change require more concerted effort to come to terms with. This makes it more difficult for governments and individuals to respond. Their actions, however, will ultimately be based on their values. And that, he says, is where the churches come in (<http://dotearth.blogs.nytimes.com/2014/05/06/can-a-pope-help-sustain-humanity-and-ecology/?php=true&type=blogs&r=0>). The Catholic Church, for example, has an ethical framework in its social teaching which could be made more widely known to shape values, certainly of its own constituents.

Humanity has the scientific knowledge, the necessary technology and the economic grounds to stop climate change. We lack political will, which we can only mobilise by scientific, religious and economic institutions working together. Revkin argues there is another determinant for how humanity shapes the next part of its journey – and that is love. He quotes Walter Monk, a 96 year old oceanographer, who spoke highly unscientifically at a recent dinner table conversation: “This requires a miracle of love and unselfishness.”

Positive action will take ‘tough love’, and governments willing to sacrifice short term economic goals for long term ones – economic, social and ecological. In this election year, can we summon the love and unselfishness required to do our parts, individually and collectively, to heal our planet?