

Global Warming / Climate Change Campaign Newsletter

January 2017

(The complete version of this newsletter is available only in Japanese. These are some of the English language articles used in the latest edition of the Japanese newsletter.)

Paris Climate Agreement now official

October 2016

World leaders agreed in 2015 (at COP21) to adopt plans to address planet-warming emissions, an attempt to slow the catastrophic effects of climate change. But signatories still needed to go back to their countries and ratify the deal — a necessary step that was achieved on Wednesday.

[The Paris agreement](#), which seeks to limit global temperature rise to no more than 2 degrees Celsius, couldn't take effect until at least 55 countries responsible for more than 55% of global greenhouse emissions formally adopted it. By Wednesday, 73 countries had ratified the agreement, accounting for nearly 57% of emissions. The climate deal will enter into force in 30 days — less than a year after it was first reached.

More than 190 countries, representing 96% of global emissions, attended last year's climate conference in Paris, part of the United Nations Framework Convention on Climate Change. The U.S. and China, the world's two largest economies and greenhouse gas emitters, formally joined the agreement Sept. 3, encouraging other countries to do the same. India joined later in the month.

http://www.huffingtonpost.com/au/2016/10/06/the-paris-climate-agreement-is-now-official/?utm_hp_ref=au-homepage

World on track for 3°C of warming

November 2016

Current climate commitments are insufficient to reduce emissions by the amounts needed to avoid dangerous levels of global warming — pledges put forward to cut emissions would see temperatures actually rise by 3C above pre-industrial levels, far above the 2C of the Paris climate agreement, says The United Nations Environment Programme.

<https://www.theguardian.com/environment/2016/nov/03/world-on-track-for-3c-of-warming-under-current-global-climate-pledges-warns-un>

Surging methane emissions

December 2016

A decade-long surge of the potent greenhouse gas methane may make the fight against global warming even harder. Efforts to keep the planet from overheating have focused mostly on the main greenhouse gas carbon dioxide, a by-product of burning fossil fuels, that accounts for at least 70% of warming. But even as CO2 output has started to plateau, methane (CH4) — responsible for about 20 % of the increase in global temperatures — is soaring.

CH₄ is 28 times more efficient at trapping the sun's heat. Some 60 % of methane originates from human activity, the rest coming from wetlands and other natural sources. About a third of human-generated methane is a byproduct of the fossil fuel industry. Researchers point to a surge in coal-generated power in China, along with leakage from the natural gas fracking boom in the United States.

In the US, coal-fired power plants are being replaced mostly with ones that burn natural gas, which is primarily composed of methane. Another culprit is livestock production and agriculture (especially rice paddies), which together account for nearly two-thirds of human-made methane emissions.

<http://www.japantimes.co.jp/news/2016/12/12/world/science-health-world/surging-methane-emissions-imperil-climate-goals-new-study-warns/>
<http://www.thenation.com/article/global-warming-terrifying-new-chemistry/>

Evidence of Climate Change

World's oceans warming at increasingly faster rate, new study finds

January 2016

The world's oceans are warming at a quickening rate. Ocean water, which has a much higher heat capacity than air, [has absorbed](#) more than 90% of the excess heat and nearly 30% of the carbon dioxide generated by human consumption of fossil fuels.

<http://www.theguardian.com/environment/2016/jan/18/world-oceans-warming-faster-rate-new-study-fossil-fuels>

Warming making oceans sick, threatening food security

September 2016

Global warming is making the oceans sicker than ever before, spreading disease among animals and humans and threatening food security across the planet, a major scientific report said on Monday.

<http://www.japantimes.co.jp/news/2016/09/06/world/science-health-world/global-scientists-warn-human-caused-warming-making-oceans-sick-threatening-food-security/>

Climate change now affecting all levels of life

November 2016

Fish being caught for our tables are shrinking according to the journal *Science*. There has been a 23% decrease in commercial catches because of a reduction of body size, caused by rising ocean temperatures. "This in in response to ocean warming over the last forty years."

<http://www.smh.com.au/environment/climate-change-now-affecting-all-levels-of-life-20161111-gsn32p.html>

Marine heatwaves are causing unprecedented climate chaos

August 2016

First seabirds started falling out of the sky, washing up on beaches from California to Canada. Then emaciated and dehydrated sea lion pups began showing up. A surge in dead whales was reported in the same region, and that was followed by the largest ever toxic algal bloom seen along the Californian coast. This chaos was caused by a single massive heatwave, unlike anything ever seen before. But it was not the sort of heatwave we are used to thinking about, where the air gets thick with warmth. This occurred in the ocean, where the effects are normally hidden from view.

<https://www.theguardian.com/science/2016/aug/15/the-blob-how-marine-heatwaves-are-causing-unprecedented-climate-chaos>

2015 had 10 \$1 billion in damages climate events

January 2016

2015 included 10 major climate events, such as droughts and storms, that each led to over \$1 billion in damages.

<http://www.japantimes.co.jp/news/2016/01/08/world/science-health-world/15-second-hottest-year-record-u-s-10-1-billion-damages-climate-events-noaa/>

Strongest ever southern hemisphere storm hits Fiji

In February 2016 Cyclone Winston, with estimated wind gusts of up to 315km/h thought to be the strongest ever recorded in the southern hemisphere, hit Fiji.

<http://www.theguardian.com/australia-news/2016/feb/20/cyclone-winston-virgin-australia-and-jetstar-cancel-services-to-and-from-fiji>

Five Pacific islands lost to rising seas

May 2016

Five tiny Pacific islands have disappeared due to rising seas and erosion. The islands were part of the [Solomon Islands](#), an archipelago that over the last two decades has seen annual sea levels rise as much as 10 mm.

<http://www.theguardian.com/environment/2016/may/10/five-pacific-islands-lost-rising-seas-climate-change>

Entire American Community Is Being Relocated Because of Sea Level Rise

March 2016

The Biloxi-Chitimacha-Choctaw Indians have called the Isle of Jean Charles home for nearly 200 years. Due to 20 cms of sea level rise, the entire community is going to be resettled.

<http://gizmodo.com/an-entire-native-american-tribe-is-being-relocated-beca-1765216997>

New York and London will be submerged

February 2016

Even if we meet our carbon reduction targets and stay below [the 2°C global warming](#)

threshold, 20% of the world's population will eventually have to migrate away from coasts swamped by rising oceans. Cities including New York, London, Rio de Janeiro, Cairo, Calcutta, Jakarta and Shanghai would all be submerged.

<http://www.theguardian.com/environment/climate-consensus-97-per-cent/2016/feb/24/earth-is-warming-is-50x-faster-than-when-it-comes-out-of-an-ice-age>

Anthrax outbreak triggered by climate change sickens dozens in Arctic Circle

August 2016

A 12-year-old boy in the far north of [Russia](#) has died in an outbreak of anthrax that experts believe was triggered when unusually warm weather caused the release of the bacteria. More than 2,300 reindeer have died in the outbreak. For the past month, the region has been experiencing abnormally high temperatures that have reached 35C.

<https://www.theguardian.com/world/2016/aug/01/anthrax-outbreak-climate-change-arctic-circle-russia>

Positive News

Agreement to eliminate HFCs

October 2016

The Montreal protocol phased out the gases that were destroying the ozone layer, averting potential catastrophe and healing the hole that human activities had opened in our protective layer. Unfortunately, it had a side-effect overlooked when it was signed in the 1980s: some of the chemicals substituted for the ozone-destroyers had an effect on the climate thousands of times higher than carbon dioxide. This month, world governments agreed to address that by eliminating the substitute chemicals – called HFCs – potentially reducing rising temperatures by as much as 0.5C in a relatively short time.

<https://www.theguardian.com/commentisfree/2016/oct/23/the-guardian-view-on-climate-change-good-news-but-not-yet-good-enough>

Airlines embrace U.N. pollution plan

September 2016

Airlines have been operating in a world where they pay no fuel taxes, face no legally-binding fuel efficiency requirements, [and have no limits placed on their CO2 emissions](#). Now the aviation industry is supporting a U.N. proposal to limit pollution from international flights.

<https://www.theguardian.com/environment/2016/sep/26/planes-need-to-stop-existing-in-a-parallel-universe-when-it-comes-to-the-climate-fight>

French banks committed to phasing out financing for coal-fired power plants

December 2016

http://www.theecologist.org/News/news_analysis/2988429/the_big_shift_why_the_ban

[ks_need_to_stop_investing_our_money_in_fossil_fuels.html](#)

Costa Rica went 76 straight days using 100% renewable electricity
September 2016

<http://www.vox.com/2016/9/8/12847160/costa-rica-renewable-electricity>

Portugal went four days on just renewable energy

Portugal kept its lights on with renewable energy (solar, wind and hydro power) alone for four consecutive days in May 2016.

<http://www.theguardian.com/environment/2016/may/18/portugal-runs-for-four-days-straight-on-renewable-energy-alone>

Global wind power capacity tops nuclear energy for first time

February 2016

The capacity of wind power generation worldwide reached 432.42 gigawatts (GW) at the end of 2015, up 17% from a year earlier and surpassing nuclear energy for the first time, according to data released by global industry bodies.

<http://www.japantimes.co.jp/news/2016/02/20/national/global-wind-power-capacity-top-s-nuclear-energy-for-first-time/>

It's possible to cut emissions without jeopardizing the economy

November 2016

Dr Joeri Rogelj, of Austria's International Institute for Applied Systems Analysis, says "Emissions can be slashed without jeopardizing economic growth, the eradication of poverty or food security," he says.

<https://www.theguardian.com/environment/planet-oz/2016/nov/19/marrakech-climate-talks-wind-down-with-maze-of-ambition-still-ahead>

US agency reaches 'holy grail' of battery storage sought by Musk and Gates

March 2016

Advanced Research Projects Agency-Energy – a branch of the Department of [Energy](#) – says it has attained the 'holy grail' of energy – the next-generation system of battery storage that has been hotly pursued by the likes of Bill Gates and [Elon Musk](#). Electricity companies need large-scale energy storage systems to bring more solar and wind power on to the grid.

<http://www.theguardian.com/environment/2016/mar/03/us-agency-says-has-beaten-elon-musk-gates-to-holy-grail-battery-storage>

Government eyes 'zero emission' fuel cell vehicles

January 2016

A government-led project is under way in Japan to make fuel cell vehicles even friendlier to the environment. Powered by hydrogen, FCVs are 'zero emission' vehicles that emit only water. But carbon dioxide, a primary culprit of global warming, is

emitted by FCVs, although indirectly, because the hydrogen is usually produced from fossil fuels. The Environment Ministry has launched a project to make FCVs zero-emission vehicles in the real sense of the term, by generating hydrogen for them from renewable energy sources such as sunlight and wind, instead of fossil fuels.

<http://the-japan-news.com/news/article/0002690894>

Japan News

Japan belatedly ratifies Paris pact tackling global warming

November 2016

The Lower House approved the Paris Agreement on climate change Nov. 8, four days after the international treaty went into effect.

<http://www.asahi.com/ajw/articles/AJ201611080058.html>

Japan facing fallout from delay on Paris climate pact

November 2016

"Japan's slowness to ratify the pact indicates a lack of awareness surrounding major global economic shifts that aim to cut society's reliance on carbon," said Mie Asaoka, president of the Kiko Network.

This lag is particularly evident in clean power. While the U.S. and European countries have imposed national restrictions on carbon emissions for new coal-fired power plants, Japan leaves setting such limits up to the power industry.

<http://asia.nikkei.com/Politics-Economy/International-Relations/Japan-facing-fallout-from-delay-on-Paris-climate-pact>

Japan also intends to count toward its own reduction quota lower emissions stemming from more efficient coal gasification power plants it will help build and upgrade in developing countries. But the U.S., as well as a number of European nations, does not count the exporting coal power technology as helping to reduce emissions.

<http://asia.nikkei.com/Politics-Economy/International-Relations/Japan-facing-fallout-from-delay-on-Paris-climate-pact?page=2>

Greenhouse gas emissions fall for first time since Fukushima crisis

April 2016

Japan's greenhouse gas emissions fell 3.1% in fiscal 2014 from a year earlier, dropping for the first time since the 2011 Fukushima nuclear disaster.

<http://www.japantimes.co.jp/news/2016/04/15/national/greenhouse-gas-emissions-fall-first-time-since-fukushima-crisis/>

Sun no longer shines on Japan's solar boom as subsidies wane

July 2016

The market for photovoltaic units is shrinking. Repeated tariff cuts and difficulty

securing land and grid connections are among the reasons.

<http://www.japantimes.co.jp/news/2016/07/14/national/sun-no-longer-shines-japans-solar-boom-subsidies-wane/>

Interest in climate change falters

September, 2016

Japanese people are less interested in climate change now than nine years ago, a government survey has shown.

<http://www.japantimes.co.jp/news/2016/09/25/national/science-health/japanese-interest-climate-change-falters-especially-among-young-survey/>

Lights off, hold the elevator

August 2016

Exporters are coping with the recent currency stresses by penny-pinching - turning off lights and cramming elevators. Toyota shut down two elevators at its Tokyo headquarters. At Sharp workers are not allowed to have the air conditioning lower than 28 degrees Celsius. (Editor: They should have started reducing electricity use years ago.)

<http://www.japantoday.com/category/business/view/lights-off-hold-the-elevator-japan-incs-answer-to-the-rising-yen>

Tiger mosquitoes spread north to Aomori

October 2016

Asian tiger mosquitoes that can transmit dengue, Zika fever and other diseases have spread to the northern tip of Japan's main Honshu island due to global warming.

<http://www.asahi.com/ajw/articles/AJ201610100019.html>

Catholic News

Japan

Five bishops launched the Japanese translation of Laudato Si' at Koujimachi church on December 14.

International

Bringing Laudato Si' to Life (excerpts)

Tomás Insua, Global Catholic Climate Movement

(This essay was prepared for the seminar Laudato Si' and the Path to COP22', held at the Pontifical Academy of the Sciences, 28 September 2016)

The challenge remains for the Catholic Church – both hierarchy and grassroots – to bring to life the important message of Laudato Si' and continue to remind the human family about the urgency and severity of the climate crisis. The magnitude of the urgency sadly continues to grow.

In the first place, *Laudato Si'* is a call for Christians to undergo “an ecological conversion, whereby the effects of their encounter with Jesus Christ become evident in their relationship with the world around them” (LS 217). But statements are not enough. The vast majority of the Catholic community is still unaware of the Pontiff’s invitation to join this celebration.

Soon after the release of *Laudato Si'*, Pope Francis instituted the World Day of Prayer for the Care of Creation to be celebrated on September 1 each year. Aware that a single day of prayer on September 1 was too little to engage meaningfully with the creation care theme, some Churches celebrate a month-long Season of Creation. It is worth mentioning the proposal for a liturgical Season of Creation, by the Columbans, “to better acknowledge the first article of the creed, God as Creator”. Even if the current liturgy already has a lot of references to creation and God as Creator, there is very little awareness among the faithful about these creation themes in our liturgical rites.

The carbon footprint of the Catholic community is gigantic, and so far there are too few cases of Catholic institutions that have implemented bold measures to mitigate this harmful impact.

Global Catholic Climate Movement is advancing the proposal of a “Roman Catholic Church Global Sustainability Program” that was originally raised by Focolare. The proposal intends to measure the current impact of the Catholic Church on the environment and to take specific, measurable steps to improve our collective awareness and care for God’s creation. This commits the Church to become more transparent and explicit in all of its operations in order to assess its environmental impacts and change them in order to create the maximum positive social, environmental and economic benefit.

The scientific community has been very vocal about the need to change course, but has not been very successful in triggering a meaningful response from governments worldwide because of the powerful vested interests at play.

The world needs to shut down almost two thirds of the current extraction operations of the fossil fuel industry. And the magnitudes are even more drastic if the wider unexploited reserves are considered: 85% of the reserves need to remain in the ground if we are to stay below the 1.5 degrees threshold.

“Our common home is being pillaged, laid waste and harmed with impunity. Cowardice in defending it is a grave sin ... I ask you, in the name of God, to defend Mother Earth”. (Pope Francis’ address to the Second World Meeting of Popular Movements, Santa Cruz de la Sierra, Bolivia, 9 July 2015) Pope Francis says “public pressure has to be exerted in order to bring about decisive political action. Society ... must put pressure on governments to develop more rigorous regulations, procedures and controls” (LS 179).

The Church can raise its voice in the public sphere to call for the implementation of the urgently-needed public policies to protect our common home. First, it must join the mobilizations of the wider climate movement. Archbishop Ramon Arguelles of Lipa

archdiocese in the Philippines led 10,000 people in a march against local coal plants. To stress the dramatic urgency of the climate crisis, several Global Catholic Climate Movement members engaged in civil disobedience – for example in Australia and in the United States – to stress the dramatic urgency of the climate crisis.

It is encouraging to see that many Catholic institutions are using their financial assets for good by divesting from fossil fuel corporations and reinvesting in renewable energy as a response to the Laudato Si' call to replace fossil fuels “without delay” (LS 165).

<http://catholicclimatemovement.global/wp-content/uploads/2016/09/BringingLaudatoSiToLife-Sept2016.pdf>

Addressing climate change is a 'moral imperative'

William E. Lori, Archbishop of Baltimore

In the Archdiocese of Baltimore, we entered into a power purchase agreement that will supply 20% of the archdiocese's energy needs with solar power. This energy will come from over 17,000 solar photovoltaic panels in Harford County. The new solar panel system will allow our archdiocese to manage our energy costs and devote more funding to ministries. Just as importantly, it will also reduce our environmental impact and put into practice the values of Laudato Sí. Catholic schools throughout the archdiocese teach sustainability and conservation in their curricula and nearly two dozen have received the "Green School" designation from the Maryland Association for Environmental and Outdoor Education. And many Catholic parishes are engaged in practices from community gardens and management of stormwater runoff to energy conserving initiatives and use of "green" eco-friendly materials in building projects.

Our individual and local actions are critically important, but also ultimately insufficient given the immense urgency of climate change. We need to come together as a country to do the big things that we cannot do as individuals. For many years, the U.S. Conference of Catholic Bishops has urged our national leaders to address climate change. Riding the wave of Laudato Sí, we bishops became even more vocal this past year. Leading bishops called for strong national standards on carbon pollution from power plants, such as through the Clean Power Plan. Our leading bishops also urged Congress to allocate money through the Green Climate Fund to assist poor countries struggling to adapt to climate disruptions like water scarcity and crop failure.

Climate change is not an issue that is decades away; it is affecting us right now. And addressing climate change is a moral imperative for all of us. How well we uphold our obligation affects our brothers and sisters across the globe and will have enormous consequences for the health and safety of our children and grandchildren.



A statue of the Virgin Mary partially submerged in floodwater in Sorrento, Louisiana, U.S., August 2016

<http://www.baltimoresun.com/news/opinion/oped/bs-ed-encyclical-anniversary-20160625-story.html>

Thousands of UK churches ditch fossil fuel electricity

More than 3,500 churches across Britain have moved their electricity supply to renewables, or are planning to do so. About 2,000 churches belonging to 16 Catholic dioceses are running entirely on renewable energy.

John Arnold, bishop of Salford, called on other churches to follow suit in moving to renewable power: “There are many ways in which we respond to the threat and reality of climate change. Adopting renewable energy for our church buildings must be a priority [and by doing so] we will directly help people threatened, and already most severely affected, by climate change.”

The new day of prayer for creation has been designated as the start of the [“Creationtide”](#) season, running from 1 September to 4 October this year, which will incorporate the traditional - and more familiar to many - festivals to celebrate the harvest, which often involve gifts of farm produce to the poor in parishes throughout the UK.

Nicholas Holtam, bishop of Salisbury, and the lead for the Church of England on environmental issues, said: “Celebrating Creationtide marks a shift in the Christian understanding of our relationship to creation under God. The consequences of teaching over recent centuries that humanity has been given domination over creation are clear in the complex environmental crises we now face. It is important that Christians rediscover

older traditions of a godly relationship of humanity to the wider created order.”

He called on people to consider using renewable energy in their homes, schools and communities at large.

<https://www.theguardian.com/environment/2016/sep/01/churches-salvation-army-fossil-fuel-electricity>

The **Forum on Religion and Ecology** is the largest international multireligious project of its kind. The Forum recognizes that religions need to be in dialogue with other disciplines (e.g., science, economics, education, public policy) in seeking comprehensive solutions to both global and local environmental problems.

The Forum grew out of a series of conferences on religion and ecology from 1996-1998 at Harvard’s Center for the Study of World Religions. Over 800 environmentalists and international scholars of the world’s religions participated. It was the largest ever gathering of Shinto. Scholars of Buddhism discussed what Buddhism can contribute to an understanding of nature. Ten volumes resulted that were published by Harvard. A concluding series of conferences included one on world religions and climate change.

<http://fore.yale.edu/>

Hints for Action

No fracking, drilling or digging is the only way to save life on Earth

September 2016

Using industry’s figures, it shows that burning the oil, gas and coal in the fields and mines that is already either in production or being developed, is likely to take the global temperature rise beyond 2C. So politicians can’t possibly honour the Paris agreement unless we stop developing all new fossil fuel reserves.

<https://www.theguardian.com/commentisfree/2016/sep/27/fracking-digging-drilling-paris-agreement-fossil-fuels>

<https://newrepublic.com/article/136987/recalculating-climate-math>

Scientists warn world will miss key climate target

August 2016

“By 2025 we will have to have closed down all coal-fired power stations across the planet,” said John Schellnhuber, director of the Potsdam Institute for Climate Impact Research.

<https://www.theguardian.com/science/2016/aug/06/global-warming-target-miss-scientists-warn>

Fossil Fuel Subsidies

May 2015

The International Monetary Fund says fossil fuel subsidies amount to over \$5 trillion

annually, i.e., much more than renewable energy receives. Governments are paying industry to destroy the Earth, and they're paying with our money.

<https://www.theguardian.com/environment/2015/may/18/fossil-fuel-companies-getting-10m-a-minute-in-subsidies-says-imf>

Financial markets are stymying climate action

June 2016

The greatest point of resistance to genuine change is how banks, and to a lesser extent stock markets, allocate capital. Only 15% of bank lending funds new capital and investment. Of that, only a tiny proportion will be directed at the kind of reconfiguring of industrial systems that is required.

<http://www.eurekastreet.com.au/article.aspx?aeid=49516>

Insurance companies feel activists' heat

May 2016

Climate activists are targeting the role of insurance companies in the expansion of fossil fuel production, highlighting the impact of extreme weather events on their bottom line.

<http://www.theguardian.com/australia-news/2016/may/02/insurance-companies-underwriting-fossil-fuels-climate-market-forces>

Clean development aid

November 2016

Rich countries have an obligation to provide aid — finance (billion of dollars) and technology — to impoverished countries to allow them to develop economically without an explosive increase in greenhouse gas emissions, e.g. by financing investment in renewable energy.

<https://international.la-croix.com/news/cop22-and-climate-change-adaptation-aid/4215>

UN proposal of debt relief for climate adaptation divides aid experts

October 2014

The [UN Development Programme](#) (UNDP) is working on an initiative that would see rich countries write off debt owed to them by Small Island Developing States (Sids) in exchange for the money being spent on climate change adaptation.

<http://www.theguardian.com/global-development-professionals-network/2014/oct/21/un-climate-debt-swap-is-fundamentally-unjust-say-development-agencies>

Lack of funding in clean energy for poorest

June 2016

Only a tiny fraction of climate change funding is going into small-scale solar, biogas and other off-grid systems that may be the best way to get power to the world's poorest, researchers say.

<http://the-japan-news.com/news/article/0003027081>

Eat less meat

February 2016

Agriculture and food together, in terms of the greenhouse gases they emit, account for about the same as all lighting, all cars, all air travel, all washing machines, all heating, and all air conditioning.

An American family of four eating an average amount of meat, driving two cars an average amount, emits more greenhouse gases from the meat than they do from driving the cars. So, reducing their meat to about half of what they would normally eat, would be the equivalent of getting rid of a family car.

<http://www.thenakedscientists.com/HTML/interviews/interview/1001669/>

http://www.thenakedscientists.com/HTML/typo3conf/ext/naksci_podcast/jplayer/player.php?podcast=1001264

What You Can Do About Climate Change

You're actually better off eating vegetables from Argentina than red meat from a local farm. Eating local is lovely, but most carbon emissions involving food don't come from transportation — they come from production, and the production of red meat and dairy is incredibly carbon-intensive.

http://www.nytimes.com/interactive/2015/12/03/upshot/what-you-can-do-about-climate-change.html?_r=0

Are we capable of making such changes for the sake of others? In 1791 300,000 British people, to dissociate themselves from slavery, stopped using sugar, reducing sales by one-third.

<https://www.theguardian.com/commentisfree/2016/oct/18/climate-change-airport-expansion-heathrow>

Oil industry knew of climate concerns 45 years ago

April 2016

ExxonMobil, the world's largest oil company, knew of climate change as early as 1981, only to spend millions of dollars over the following 27 years to promote climate denial. Now 17 US state attorneys general have formed a coalition to investigate ExxonMobil's activities.

<http://www.theguardian.com/business/2016/apr/13/climate-change-oil-industry-environment-warning-1968>

<https://www.theguardian.com/environment/climate-consensus-97-per-cent/2016/jul/18/deja-vu-as-with-tobacco-the-climate-wars-are-going-to-court>

Carbon producers face human rights case

July 2016

The Commission on Human Rights of the Philippines has accused 47 'carbon majors' including Shell, BP, Chevron, BHP Billiton and Anglo American, of breaching people's fundamental rights to "life, food, water, sanitation, adequate housing, and to self

determination.” The Commission argues that the companies should be held accountable for the effects of their greenhouse gas emissions in the [Philippines](#). In 2013 Typhoon Haiyan killed more than 6,000 people and displaced 650,000.

<https://www.theguardian.com/environment/2016/jul/27/worlds-largest-carbon-producer-s-face-landmark-human-rights-case>

Shipping industry criticised for failure to reach emissions deal

October 2016

The International Maritime Organisation has been condemned for failure to urgently tackle the industry’s impact on climate change.

<https://www.theguardian.com/environment/2016/oct/28/shipping-industry-fails-agreement-cap-carbon-emissions>

(Editor: it is important to buy food and other products produced in Japan — to avoid the greenhouse gas emitted by ships and planes carrying the produce.)

Japan’s food self-sufficiency rate misses target again

August 2016

Japan’s food self-sufficiency rate on a calorie intake basis was 39% in fiscal 2015 for the sixth year in a row. Japan has one of the lowest food self-sufficiency rates among the major economies.

<http://www.japantimes.co.jp/news/2016/08/02/national/japans-food-self-sufficiency-rate-misses-target/>

Switching banks: nearly half of all Australians would consider move over climate change

September 2016

About half of all Australians would be likely to switch banks if they found out their bank was lending money to projects that contribute to climate change, according to polling commissioned by the financial activist group Market Forces.

<https://www.theguardian.com/environment/2016/sep/15/switching-banks-nearly-half-of-all-australians-would-consider-move-over-climate-change>

Geoengineering

... refers to a set of proposed techniques to intervene in and alter earth systems on a large scale – particularly to climate system manipulations as a “technofix” for climate change. These manipulations may include so-called solar radiation management (SRM) as well as other earth system interventions under the umbrella of carbon dioxide removal (CDR). Geoengineering can be land-based interventions, interventions in the oceans, or interventions in the atmosphere.

Recent studies indicate that geoengineering proposals such as BECCS (bioenergy with carbon capture and storage) would have significant negative impacts on biodiversity, food security and livelihoods. The concept of ‘negative emissions’ techniques is highly

speculative and does not have proven viability. Geoengineering functions as “the perfect excuse” for high carbon emitters to avoid real GHG reductions.

<http://etcgroup.org/content/geoengineering-cop-13-convention-biological-diversity>

Resources

Jesuit Social & Pastoral Center (Tokyo) <http://www.jesuitsocialcenter-tokyo.com/>

Global Catholic Climate Movement <http://catholicclimatemovement.global/>

Our Voices <http://ourvoices.net/index.html>
<http://ourvoices.net/us-catholics>

Green Faith <http://www.greenfaith.org/>

The Season of Creation <http://seasonofcreation.com/>