1. UK public confidence in nuclear remains steady despite Fukushima

Benefits of nuclear power outweigh risks, say 41% of the British public, according to poll

Alok Jha
The Guardian, Friday 9 September 2011


The accident at Fukushima in Japan in March this year seems to have had little overall impact on the UK public's confidence in nuclear power, according to a poll.

The survey, carried out by Populus last month and commissioned by the British Science Association, found that 41% of respondents agreed the benefits of nuclear power outweighed the risks, up from 38% in 2010 and 32% in 2005. Those who said that the risks greatly or slightly outweighed the benefits of nuclear power in 2010 numbered 36%, and in 2011 this dropped to 28% of respondents.

The nuclear power plants at Fukushima in northern Japan were damaged during the magnitude 9 earthquake and the resulting tsunami that hit the country in March. Three of the six nuclear reactors suffered meltdowns in the biggest nuclear accident since Chernobyl in 1986. There were concerns that the event would irrevocably damage the case for nuclear power around the world – in the months after the Fukushima accident Germany announced the cancellation of its future programme. And a referendum in Italy in June voted down the government's plan to start a programme of new nuclear reactors.

"It's genuinely surprising to me that views have returned to these early 2010
levels quite so quickly and slightly more positively," said Nick Pidgeon of the University of Cardiff, who discussed the findings of the latest poll at a briefing to mark the launch of the British Science Festival, which starts in Bradford on Saturday. "There's been a lot of speculation about the impacts of Fukushima on public attitudes – this is the first fully independent study we've had in the UK."

Though overall support was up, there was a striking difference between men and women, with 53% of men in favour of nuclear power but only 21% of women supportive. "If you dig into the data, you see that men in particular become much more confident about nuclear energy," said Pidgeon.

**Monbiot effect**

He also said that blanket media coverage and commentary – something he referred to as the "George Monbiot effect" – may have had a positive effect on public attitudes because, despite the severity of the crisis, no one has so far died.

Populus interviewed 2,050 adults between 26 and 29 August and weighted its results to ensure they were representative of the British population.

Overall, the support for nuclear power has been gradually increasing for about 10 years, said Pidgeon, and, in the past five years, the majority of people in Britain has come to support the renewal of the nuclear programme.

Pidgeon said that polls in the direct aftermath of the Fukushima accident had showed a dip in support for nuclear in the UK and elsewhere, though confidence did not collapse. "There were still more people, even immediately afterwards, in favour of nuclear energy than against in Britain," he said.

The focus of potential concerns has also shifted in the wake of Fukushima. "If you asked people why they were unhappy about nuclear energy a year ago, they would have brought waste up," said Pidgeon. "What is clear from other polling is that accidents have gone to the top of what people are now concerned about with nuclear energy, the waste has dropped further down."

Bryony Worthington, a Labour peer and environmental campaigner, said that for the general public the perception of the main cause of the Fukushima problem had not been the design of the reactor but the siting of the power plant. "Most people said, hang on, why did you put them all on that eastern
seaboard, which is a seismically unstable region?"

The withdrawal of support for future nuclear power stations by the German government, she said, was political. "For Angela Merkel to reverse her decision and phase out the nuclear, Fukushima gave her a good opportunity to do it. She was already under huge political pressure to do that and Fukushima was just the trigger she found politically expedient to do it."

**Thorium reactors are safer**

Scientists at the briefing discussed the future of nuclear power, arguing that thorium, rather than uranium, was the safer alternative fuel. Bob Cywinski, of the University of Huddersfield, said: "One tonne of thorium is equivalent to 200 tonnes of uranium and it doesn't need processing or enriching – 57 kilotonnes of thorium would provide the total energy need of the planet for a year, not just electricity but transport."

Though thorium has been used as a fuel in experimental reactors in the past, it was sidelined in favour of uranium. "Why did we stop using it? It's the unfortunate fact that civil nuclear power has been so closely linked with the military. And thorium, unfortunately, does not produce plutonium and is useless as far as proliferation is concerned. The linking of civil nuclear with military nuclear has probably done a great disservice not just to thorium but to nuclear energy in general."

Kirk Sorensen, president of the Weinberg Foundation, a new NGO launched on Thursday to promote the cause of thorium around the world, said the design of thorium reactors had always focused on safety first. The intent was to eliminate the root causes of danger in existing nuclear reactors, such as high-pressure coolants and chemically reactive situations. In addition, thorium reactors only operate as long as there is a source of neutrons being beamed in to split atoms. If this is switched off, the reactor shuts down without any human intervention.

"Reasonable estimates suggest there is no more than 100 years of uranium left, maybe it is time we started turning to thorium," said Cywinski. "Thorium is four times more abundant than uranium. In principle, there is something like 10,000 years of energy left in our thorium reserves."

2. **Green capitalists hijack**
carbon agenda and we will end up paying

BY: GARY JOHNS
From: The Australian October 27, 2011 12:00AM


THERE was a time when capitalists were capitalists. Now, half the bastards parade as greens making money from green ideology. The other half have given up in the face of environmentalism.

The combination of corporate rent-seeking and capitulation makes the world more vulnerable to mishap. No wonder the gormless ferals "Occupying" city squares across the Western world are confused.

Green capitalism wants public corporations to behave not as shareholders and taxpayers wish but as green activists wish. Green activists and corporate people cosy up to regulators and governments, but especially the UN.

Corporations accept the activity as strategic, coping with political pressure for the nebulous desire for sustainability. Some corporations acquiesce, some make money.

There are crooks such as Enron and jokers such as BP (remember Beyond Petroleum?) who play the game. Others just attend conferences. But attending lends weight to stupidity and rent-seeking on a global scale.

These conferences become places where politicians grandstand. Remember Kevin at Copenhagen? A few days ago in Washington, DC, a group of chief executives, "major investors and bankers", together with former British prime minister Gordon Brown and former president of Ireland Mary Robinson, called for a "far-reaching reform of the global financial system". The price of applause is taxpayer subsidies and preferential regulation.
These people helped the US and Europe live beyond their means. Now, under the banner of the UN Environment Program Finance Initiative Global Roundtable they want to direct good money into bad investments under the guise of sustainability.

This is the crowd that brought the massive waste of debt forgiveness, Make Poverty History and the Clean Development Mechanism. Brown has suggested a global tax to raise even more money for aid and the environment. Tell that to the Greeks and the Irish.

This is the crowd plotting the UN Conference on Sustainable Development (or Rio+20) in Rio de Janeiro where even more promises will be made with money that does not exist. They want to "mobilise investment at scale by the banking and investment sectors into the clean energy sector, renewable energy, green buildings and retrofitting, clean vehicles and fuels". You will pay for this.

The farce is that even on its own terms, the combination of green activists, corporate capitulation and UN mischief-making moves the world further from the possibility of coping with issues such as climate change and poverty.

Take the example of nuclear power. Siemens built all of Germany's 17 nuclear reactors. In 2006 Siemens' president and chief executive Peter Loescher said: "In view of global climate change and the increasing power demand worldwide, for us nuclear energy remains an essential part of a sustainable energy mix. Nuclear energy, which is practically CO2-free, will gain in importance above all with a view to climate protection."

In September this year Loescher announced Siemens' withdrawal from the nuclear industry. The firm will no longer build nuclear power stations.

Although the Fukushima nuclear disaster in March pushed it across the line, it was the constant drip of ideology that broke the company's resolve. As Loescher said, it was the firm's answer to "the clear positioning of German society and politics for a pullout from nuclear energy".

Siemens' 17 nuclear reactors accounted for 23 per cent of German electricity production. A lot of solar panels and windmills are going to be built with taxpayers' subsidy to fill that gaping hole. Should the windmills come at the expense of the Greece bailout?
And our little green capitalists' tentacles reach from global to local. A recent press release screamed: "World's largest investors, worth $20 trillion, step up call for urgent policy action on climate change". It was our friends at the UNEP Finance Initiative, in tandem with the likes of the local Investor Group on Climate Change.

IGCC is a green-capitalist crowd. It represents finance, including church and industry super funds. Being from finance, they seek rent rather than capitulate a la Siemens. IGCC wants to "encourage government policies and investment practices that address the risks and opportunities of climate change, for the ultimate benefit of superannuants and unit holders". You bet they do.

The Australian chief executive is Nathan Fabian, former adviser to Penny Wong in the opposition portfolio of corporate governance and responsibility. Fabian by name, Fabian by nature.

Are the Fabians telling investors that the Senate estimates statement by Treasury's Martin Parkinson on October 20, that "the cost impact of the carbon tax is very, very small", was based on an assumption there would be a global agreement on reductions of CO2 emissions?

Julia Gillard cannot achieve what the great Kevin Rudd could not. An agreement by developing countries attending the 17th Conference of the Parties to the UN Framework Convention on Climate Change in Durban next month to curb emissions will not be forthcoming.

Make sure you tell your members, Fabian.

gary.johns@acu.edu.au

3. Be prudent with climate claims

BY: GEORGE PELL
From: The Australian October 27, 2011 12:00AM

SCIENCE and technology have already achieved considerable mastery over nature, and massive local achievements. But where is the borderline separating us from what is beyond human power?

Where does scientific striving become uneconomic, immoral or ineffectual and so lapse into hubris? Have scientists been co-opted on to a bigger, better-advertised and more expensive bandwagon than the millennium bug fiasco?

We can only attempt to identify the causes of climate change through science and these causes need to be clearly established after full debates, validated comprehensively, before expensive remedies are imposed on industries and communities.

I first became interested in the question in the 1990s when studying the anti-human claims of the "deep greens". Mine is not an appeal to the authority of any religious truth in the face of contrary scientific evidence. Neither is it even remotely tinged by a postmodernist hostility to rationality.

My appeal is to reason and evidence, and in my view the evidence is insufficient to achieve practical certainty on many of these scientific issues.

Recently Robert Manne, following fashionable opinion, wrote that "the science is truly settled" on the fundamental theory of climate change: global warming is happening; it is primarily caused by the emission of greenhouse gases, especially carbon dioxide; and it is certain to have profound effects in the future.

His appeal is to the "consensual view among qualified scientists". This is a category error, scientifically and philosophically. In fact, it is also a cop-out, a way of avoiding the basic issues.

The basic issue is not whether the science is settled but whether the evidence and explanations are adequate in that paradigm.

I fear, too, that many politicians have never investigated the primary evidence.
Much is opaque to non-specialists, but persistent inquiry and study can produce useful clarifications, similar to the nine errors identified by the British High Court in Al Gore's propaganda film, An Inconvenient Truth.

The complacent appeal to scientific consensus is simply one more appeal to authority, quite inappropriate in science or philosophy.

It is not generally realised that in 2001 at least, one of the Intergovernmental Panel on Climate Change Third Assessment Report's working groups agreed: "In climate research and modelling, we are dealing with a coupled, non-linear, chaotic system, and therefore that the long-term prediction of future climate states is not possible."

Claims of atmospheric warming often appear to conflict and depend upon the period of time under consideration.

► The earth has cooled during the past 10,000 years since the Holocene climate optimum.

► The earth has cooled since 1000 years ago, not yet achieving the temperatures of the Medieval Warm Period.

► The earth has warmed since 400 years ago after the Little Ice Age three centuries ago.

► The earth warmed between 1979 and 1998 and has cooled slightly since 2001.

The following facts are additional reasons for scepticism.

► In many places, most of the 11,700 years since the end of the last ice age were warmer than the present by up to 2C.

► Between 1695 and 1730, the temperature in England rose by 2.2C. That rapid warming, unparalleled since, occurred long before the Industrial Revolution.

► From 1976 to 2001, "the global warming rate was 0.16C per decade", as it was from 1860 to 1880 and again from 1910 to 1940.

My suspicions have been deepened through the years by the climate movement's totalitarian approach to opposing views. Those secure in their
explanations do not need to be abusive.

The term "climate change denier", however expedient as an insult or propaganda weapon, with its deliberate overtones of comparison with Holocaust denial, is not a useful description of any significant participant in the discussion. I was not surprised to learn that the IPCC used some of the world's best advertising agencies to generate maximum effect among the public.

The rewards for proper environmental behaviour are uncertain, unlike the grim scenarios for the future as a result of human irresponsibility which have a dash of the apocalyptic about them.

The immense financial costs true believers would impose on economies can be compared with the sacrifices offered traditionally in religion, and the sale of carbon credits with the pre-Reformation practice of selling indulgences.

Some of those campaigning to save the planet are not merely zealous but zealots. To the religionless and spiritually rootless, mythology - whether comforting or discomforting - can be magnetically, even pathologically, attractive.

Whatever our political masters might decide at this high tide of Western indebtedness, they are increasingly unlikely, because of popular pressure, to impose new financial burdens on their populations in the hope of curbing the rise of global temperatures, except perhaps in Australia, which has 2 per cent of the world's industrial capacity and only 1.2 per cent of its CO2 emissions, while continuing to sell coal and iron worth billions of dollars to Asia.

Extreme weather events are to be expected. This is why I support the views of Bjorn Lomborg and Bob Carter that money should be used to raise living standards and reduce vulnerability to catastrophes.

The cost of attempts to make global warming go away will be very heavy. They may be levied initially on "the big polluters" but they will eventually trickle down to the end-users. Efforts to offset the effects on the vulnerable are well intentioned but history tells us they can only be partially successful.

Sometimes the very learned and clever can be brilliantly foolish, especially when seized by an apparently good cause. My request is for common sense and what the medievals, following Aristotle, called prudence.
The appeal must be to the evidence. First of all we need adequate scientific explanations as a basis for our economic estimates. We also need history, philosophy, even theology and many will use, perhaps create, mythologies. But most importantly we need to distinguish which is which.

Cardinal George Pell is the Archbishop of Sydney. This is an edited extract of a speech given yesterday at the Global Warming Policy Forum in London.

4. Why experts refuse to debate climate science

BY: STEVE SHERWOOD
From: The Australian October 28, 2011 12:00AM 58 comments


MANY climate scientists now refuse to take part in public forums debating climate change because it is impossible to do justice to the science.

To explain why, it helps to think of the present state of climate science as if it were a high-profile and complicated murder trial that had just ended.

After a month of courtroom arguments and careful deliberation of the testimony and evidence, the jury announces its verdict: the accused is innocent. But not everyone likes the verdict.

Gnashing of teeth and unhappiness ensue. The victim's family, the police and many others want to believe the perpetrator had been arrested, and want them brought to justice.

Some commentators, who don't know any of the jurors, begin saying they are soft on crime, were bamboozled by crafty lawyers or suffered from a conflict of interest because the government paid jury fees.

A politician enters the fray, asking why the community should accept the judgment of a "monopoly" of only 12 people on such an important matter. He proposes that the verdict be disregarded and the case judged
democratically instead.

He suggests that each solicitor present arguments and evidence on evening television, for 30 seconds. Afterwards, the people will decide, by plebiscite, based on each 30-second presentation whether the accused committed the crime.

It is hard to imagine how this would be regarded as fair. It is clearly a travesty of justice.

But climate scientists are being asked to participate in exactly this kind of arrangement when debating contrarians in public forums.

Debate is the lifeblood of science, but it is of a much deeper and more interactive kind.

The scientists who work day in and day out to understand our climate system have debated the great and small ideas for decades. They've debated in journals, at conferences, by the water coolers, by email.

These scientific debates are a lot like jury deliberations. It takes time to assimilate all the information, then separate the crucial facts from the noise. All participants must explain how they came to their views and lay their reasoning open to challenge. Flawed or inconsistent arguments are gradually weeded out. Across time a consensus often emerges. Climate scientists have reached that consensus.

More than 95 per cent of those scientists present at every step of the climate debate for significant portions of their careers agree on at least the basic point that by-products of fossil fuel burning can significantly affect climate.

Many, if not most of them, fear that climate change, if left unchecked, would be damaging for future generations. Given the uncertainties, nobody -- scientist or otherwise -- can confidently predict these fears wouldn't be realised.

It is valid that the differences in opinion on climate change should arise not with the science but with what needs to be done about its findings. In just the same way every society is entitled to a position on how murderers should be punished. These are questions of values.
But what we are seeing in climate change is that the matters of science continue to be questioned in "debates" long after the climate change trial has ended and the verdict reached. Scientists find themselves in the absurd situation where commentators and politicians are calling on Australians to discard the scientific consensus and decide between mainstream and contrarian views through 10-minute public debates and sound bites.

Of these contrarians, virtually none were present at the real scientific debates.

Such a position is comparable to holding a very strong opinion on a defendant's guilt without having attended the trial.

If you thought my earlier suggestion that solicitors would have to pack a month's trial evidence into 30 seconds was ridiculous, then imagine the task facing a climate scientist.

Climate scientists are asked to cram 50 years of climate science into -- if they are lucky -- a half-hour climate debate. This is the proportional equivalent of giving the solicitor three seconds.

In short, we are asking an expert to do as much justice to the science of climate in 30 minutes as a solicitor could do for an entire trial in just three seconds.

The basic physics of global warming may be simple, but the potential complications revived in perpetuity by contrarians took years for experts to sort out. They cannot be adequately explained in an hour or a day.

A solicitor with integrity, faced with 30 seconds to deliver trial evidence, would refuse to participate in such a scheme.

Climate scientists are refusing to enter public debates for exactly the same reason.

A system of slow, scientific deliberation that has consistently worked for hundreds of years is a far better approach to sorting out the facts of climate change than a 30-minute battle of charisma, where truth has no advantage over confabulation.

*Steve Sherwood is co-director of the University of NSW's Climate Change*
Geoffrey Blainey speaks to science's fallibility

BY: JARED OWENS
From: The Australian October 29, 2011 12:00AM


SCIENCE may be a more powerful force than ever, but its practitioners should remember that everybody stumbles on occasion, says historian Geoffrey Blainey.

In an interview published in The Weekend Australian today, one of the nation's most prolific historians discusses his latest book, A Short History of Christianity, about the religion that "shaped and misshaped much in the modern world".

The 81-year-old says that "intellectual fashions" are hindering public debate on climate change.

"I think intellectual fashions have been more powerful in the last 20 or 30 years," he says.

"The interesting thing to me about science is that it's given the benefit of the doubt now in ways that Christianity used to be given the benefit of the doubt.

"In 1970, the overwhelming majority of scientists believed that there was not going to be global warming over the next 40 years. Suddenly they change their minds and say: this is wonderful, look what science has discovered. They never say: look how science was wrong 20 years ago, when they were telling you a completely opposite version.

"So few of us are scientists that we don't realise that it's just like any other intellectual discipline and it stumbles. And has great achievements, but waits
for the achievements for too long."


6. IPCC warming assessments attract the activists and snub the sceptics

BY: MATT RIDLEY

From: The Australian October 31, 2011 12:00AM


A LITTLE-KNOWN Canadian freelancer who writes a short book dense with data and argument, and self-publishes a kindle version on Amazon, can hardly expect fame and fortune.

Yet this seems to be what is happening to Donna Laframboise, the author of The Delinquent Teenager Who Was Mistaken For The World's Top Climate Expert.

Her book has garnered nearly 90 reviews on amazon.com in just two weeks, about four-fifths of them giving it five stars.

The web is alive with discussion of this remarkable little book. The World Wildlife Fund has put out a press release denouncing it.

What is all the fuss about? Like many people, me included, Laframboise used to take climate science at face value. She thought the case had been made by a committee of many neutral scientists working for the UN that global warming was a serious threat.
After all, as Mark Twain once said, "people's beliefs and convictions are in almost every case gotten at second-hand, and without examination, from authorities who have not themselves examined the questions at issue but have taken them at second-hand from other non-examiners, whose opinions about them were not worth a brass farthing".

In 2009, two years after the Intergovernmental Panel on Climate Change received a Nobel Peace Prize, Laframboise, growing irritated with the shallow analysis of the issue in the news sources she trusted most, began reading and digging into the issue herself to get the first-hand version.

"After all," she writes, "journalists are supposed to be sceptical. They aren't supposed to take anyone's word for anything. They're supposed to dig, and question, and challenge."

She was not the first Canadian outsider to do this. About seven years before, an expert mathematician named Stephen McIntyre, also a resident of Toronto, had begun to request the data and analysis behind the famous "hockey stick graph" that appeared six times in the 2001 report of the IPCC.

He eventually found that it was a house of cards, based on faulty data filtered through a distorting statistical lens. McIntyre's careful "audit" is now legendary, as is the resistance and calumny he encountered. The hockey stick graph was dropped by the IPCC.

(Incidentally, both McIntyre and Laframboise were influenced by encountering stubborn injustice earlier in their careers: McIntyre experienced police corruption at first-hand; Laframboise investigated a miscarriage of justice in a murder case.)

Laframboise focused on the IPCC reports themselves. How were they actually written and who by? The impression the UN gave was that they were composed by thousands of senior scientists.

In the words of Rajendra Pachauri, the head of the IPCC: "These are people who have been chosen on the basis of their track record, on their record of publications, on the research that they have done . . . They are people who are at the top of their profession."

In fact, as Laframboise meticulously documents, world experts on malaria,
hurricanes and other topics are excluded because of their sceptical views; while a relatively small clique does the actual writing, many of whom are young and have such a short "track record" that they barely have higher degrees.

Moreover, many of the authors are up to their necks in activism.

For example, two of the four lead authors of the Asia chapter of the 2007 IPCC report were affiliated with the World Wildlife Fund.

That chapter was where the report claimed that Himalayan glaciers would disappear by 2035, based on a non-peer-reviewed publication from, you guessed it, WWF.

Likewise, nine chapters of the 2007 report were based partly on the work of the Australian marine biologist Ove Hoegh-Guldberg who was also a contributing author, and has been promoted to a co-ordinating lead author for the next report.

As Laframboise discovered: "Hoegh-Guldberg has had close ties to activist organisations for the past 17 years. Between 1994 and 2000 he wrote four reports about coral reefs and climate change that were funded, vetted and published by Greenpeace. Since then he has written two more for the World Wildlife Fund."

Is this organisation supposed to the judge or the prosecution?

Laframboise goes on to document the ways in which "reviewers" of the report, who are supposed to cast a critical eye over the first draft, have been blocked, ignored, even threatened if they ask for the data to back up a claim.

In one case, McIntyre asked for help in getting access to unpublished data that had been cited in evidence by the draft. He was told "if your intent is to . . . challenge (the rules), then we will not be able to continue to treat you as an expert reviewer for the IPCC."

Which brings me to Laframboise's most startling achievement. Noting that this incident and the WWF glacier claim revealed non-peer-reviewed sources being used by the IPCC, Laframboise set out to test Pachauri's claim that "we carry out an assessment of climate change based on peer-reviewed literature, so everything that we look at and take into account in our
assessments has to carry (the) credibility of peer-reviewed publications -- we don't settle for anything less than that."

In March last year, Laframboise recruited 43 private citizens in 12 countries online to audit the entire IPCC 2007 report and count the number of non-peer-reviewed references. Each section was audited by three people and the lowest (most conservative) estimate used.

Even so, the audit showed that 5587 of 18,531 -- fully one-third -- were non-peer-reviewed sources: including newspaper articles, activist reports, even press releases. The IPCC had a rule that such sources must be flagged as such. It had been ignored. When criticised for this last year by a panel of the world science academies, it simply changed the rule.

To those who are being asked to make significant economic and environmental sacrifices to prevent global warming, and are relying on second-hand accounts of this threat from the press: you have been let down. The press, derelict in its duty, has passed on opinions that in many cases are not worth Twain's "brass farthing".

Matt Ridley is the author of The Rational Optimist (Harper Collins) and writes on evolution, economics and the environment.

7. Climate change 'will boost disasters': UN report

From:
AFP November 02, 2011 12:00AM


A DRAFT UN report three years in the making finds that man-made climate change has boosted the frequency or intensity of heatwaves, wildfires, floods and cyclones and that such disasters are likely to increase in future.

The draft being discussed by the Intergovernmental Panel for Climate Change says the severity of the impacts vary, and some regions are more
Agence France-Presse has obtained a copy of the draft report's 20-page summary for policymakers, which is subject to revision by governments before release on November 18.

Hundred of scientists working under the Nobel Peace Prize-winning IPCC will vet the draft at a meeting in Kampala of the 194-nation body this month.

"This is the largest effort that has ever been made to assess how extremes are changing," said Neville Nicholls, a professor at Monash University in Melbourne and a co-ordinating lead author of one of the review's key chapters.

Mindful of an outcry by climate sceptics over flaws in an earlier IPCC text, those working on the document say the level of confidence in the findings depends on the data available.

But the overall picture that emerges is of increased volatility and frequency of dangerous weather, leading to a sharply rising risk for large numbers of people in coming decades.

The nine-chapter special report on managing the risks of extreme events and disasters to advance climate change adaptation, or SREX, is based on hundreds of recent scientific studies.

The report's main conclusions about future trends include:

• It is "virtually certain" - 99-100 per cent - that the frequency and magnitude of daily temperature extremes will increase over the 21st century on a global scale;

• It is "very likely" (90-100 per cent certainty) that the length, frequency and/or intensity of warm spells, including heatwaves, will increase over most land areas;

• Peak temperatures are "likely" (66-100 per cent certainty) to increase - compared with the late 20th century - up to 3C by 2050, and 5C by 2100;

• Heavy rain and snowfall is likely to increase over the next century over
many regions, especially in the tropics and at high latitudes;

• Droughts will likely intensify in other areas, notably the Mediterranean region, central Europe, North America, northeastern Brazil and southern Africa.

The draft's publication coincides with a series of natural catastrophes around the world that have boosted the need to determine whether such events are freaks of the weather or part of a long-term shift in climate.

Last year, record temperatures fuelled devastating forest fires across Siberia, while parts of Pakistan and India reeled from unprecedented flooding.

This year, the US has suffered from a record number of billion-dollar disasters ranging from flooding in the Mississippi and Missouri rivers to Hurricane Irene to the Texas drought.

Large swaths of China are suffering from intense drought as well, even as central America and Thailand count their dead from recent intense rains.

Most of these events match the predicted impacts of man-made global warming, which has raised temperatures, increased the amount of water in the atmosphere and warmed ocean surface temperatures - all drivers of extreme weather.

But the role of natural fluctuations in the weather and rising levels of greenhouse gases in the atmosphere has proved extremely difficult for scientists.

8. Climate sceptic Richard Muller won over by warming

From:
AP November 01, 2011 12:00AM

A PROMINENT US physicist and sceptic of global warming spent two years trying to find out if mainstream climate scientists were wrong.

In the end, he determined they were right: temperatures really are rising rapidly.

The study of the world's surface temperatures by Richard Muller was partially bankrolled by a foundation connected to global warming deniers.

He pursued long-held sceptic theories in analysing the data. He was spurred to action by a British scandal involving hacked emails of scientists.

Yet he found that the land was 1C warmer than in the 1950s. Those numbers match those by the National Oceanic and Atmospheric Administration and NASA. Professor Muller, of the University of California, Berkeley, said he went even further back, studying readings from Benjamin Franklin and Thomas Jefferson. His ultimate finding of a warming world, to be presented at a conference overnight, is no different from what mainstream climate scientists have been saying for decades.

A quarter of the $US600,000 ($570,000) to do the research came from the Charles Koch Foundation, whose founder is a major funder of sceptic groups and the conservative Tea Party movement.

Professor Muller's research team examined two chief criticisms by sceptics. One is that weather stations are unreliable; the other is that cities, which create heat islands, were skewing the temperature analysis.

"The sceptics raised valid points and everybody should have been a sceptic two years ago," Professor Muller said.

"And now we have confidence that the temperature rise that had previously been reported had been done without bias."

Professor Muller said he came into the study "with a proper scepticism", something scientists "should always have. I was somewhat bothered by the fact that there was not enough scepticism".

Professor Muller's study found that sceptics' concerns about poor weather
station quality did not skew the results of his analysis because temperature increases rose similarly in reliable and unreliable weather stations.

He also found that while there was an urban heat island effect making cities warmer, rural areas, which are more abundant, were warming, too.

9. 'Fission' sets back nuclear effort

BY: RICK WALLACE, TOKYO CORRESPONDENT
From: The Australian November 03, 2011 12:00AM


JAPAN’s sputtering efforts to resume its nuclear power program suffered a setback yesterday with a fresh "fission" incident at the stricken Fukushima plant occurring just as officials restarted one of the many reactors stalled over safety fears.

Workers at the Fukushima plant - a disaster zone since the earthquake and tsunami in March - began injecting boric acid into the No 2 reactor yesterday after signs fission had occurred.

More text available to subscribers only..

10. Nuclear backup for renewables

BY: STEPHEN MARTIN
From: The Australian November 10, 2011 12:00AM
WITH the carbon tax passing the Senate this week, it is critical that Australia gets serious about making sure viable options are seriously examined to deliver safe, reliable and low-cost, low carbon-emission energy into the future.

That means it is time for the political cowardice and uninformed green biases being shown on all sides of politics to be put aside and have a real debate on the potential for nuclear energy in Australia's energy mix.

Nuclear energy has not needed to be an option in the past, principally because of Australia's abundant supply of cheap fossil fuel reserves.

But if we are going to mitigate carbon, if we are serious about an environmentally sustainable future, Australia needs viable alternatives.

While renewables may be the end game, we are relying on significant technological breakthroughs to come on stream quickly for energy sources that are unproven on a large scale or intermittent. At present there are no proven renewable technologies that can reliably replace base-load coal.

Relying on renewables is extremely risky and irresponsible. It is essentially playing Russian roulette with energy bills for industry and households.

At the moment renewables are being touted as the fix-all solution that will magically replace our traditional energy sources. While this is a convenient message, scratch below the surface and it becomes clear that our political leaders need to take a reality check on what and when renewables will be able to deliver. Strip away the subsidies and research grants to universities and the reality is somewhat different.

The Committee for Economic Development of Australia is undertaking a major research study into Australia's energy options. Part of that research has centred on the economics, environmental impact and technological advances associated with the deployment of nuclear power as a long-term solution to meeting Australia's energy needs.

It provides the obvious back-up option. It has almost zero emissions, its
technology is proven and we have an abundant supply of uranium (more than 20 per cent of the world's proven reserves, the world's largest) being exported to other countries to use as a low-emission energy source.

The obvious question is if it's good enough for them, why isn't it good enough for us?

Understandably events such as the Fukushima disaster earlier this year cause public unease about potential catastrophic effects from nuclear accidents. However, what needs to be remembered is the Fukushima reactor was based on 1960s technology, and even then no one died directly as a result of the accident.

Modern nuclear technology has significantly improved in terms of producing almost zero waste and in safety features that would preclude nuclear accidents such as those in the past.

This is why countries such as China are continuing to expand nuclear power rollouts, and why other countries such as Thailand, Vietnam, Malaysia and even Singapore are developing their own plans to meet their energy requirements through nuclear technology.

As for Europe, Germany has decided to close most if not all of its old nuclear plants in response to safety concerns and political pressure. Instead it will buy its electricity from France, one of the leading users of nuclear technology.

Nuclear power needs to be rationally debated now because of the significant advances in nuclear technology, along with the need to ensure Australia has back-up options to renewables and is not forced to make rushed decisions or face soaring energy costs or energy shortfalls in the future.

A move to nuclear power would be an enormous shift for Australia and is not one that should be rushed. However, the reality is that even if it were decided tomorrow that Australia should go down the nuclear path, it would take a decade or more to have an operational plant, allowing for appropriate public consultation, regulatory changes, location selection, commissioning and construction.

That means we need to consider nuclear energy now if it is to be available to provide back-up, low-cost, low-emission energy as we transition from
traditional fossil fuel energy sources.

It is why the government's white paper on energy, due to be released by year's end, must seriously consider this question and not confine any comment on nuclear energy options to a boxed paragraph or footnote.

The critical period in transitioning our energy sources to cleaner options will be the two decades from 2020, when energy price rises associated with decarbonising the world really begin to bite.

Australia cannot be caught short if the technological breakthroughs required to make renewables viable don't eventuate quickly enough. The damage to Australia's economic competitiveness would be significant.

What we need now is political leadership from all sides to allow a rational debate, not one based on vested interests, ideological views or outdated information and technology, but on current and projected technological and economic options.

Nuclear power may be a challenging and uncomfortable topic for our political leaders to tackle but, by having this debate now, it may well save Australian families and businesses from unnecessary hardship in the future. CEDA's contribution will be contained in its research monograph on nuclear energy options to be released today.

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